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Section 1

General Information

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General Information

Introduction

Vehicle, Engine and Transmission ID and VIN Location, Derivative and Usage (GMC)

5138041

The VIN plate is the legal identifier of the vehicle. The VIN plate (1) is located on the upper left corner of the instrument panel (I/P) and can be seen through the windshield from the outside of the vehicle:

Vehicle Identification Number (VIN) System

Position	Definition	Character	Description
1	Region of Build	1	United States
		7	United States
2	Manufacturer	G	General Motors
		G	Navistar Inc. (7GZ Only)
3	Vehicle Brand/Type	D	GMC Incomplete Truck
		J	GMC Bus (Non School Bus)
		T	GMC Truck
		Z	GMC Incomplete Truck (Navistar Only)

Vehicle Identification Number (VIN) System (cont'd)

Position	Definition	Character	Description
4	GVWR/Brake System/Body Style	W	8,001–9,000 lbs/Hydraulic/CargoVan/Four Door Cab/ Utility or Passenger Van
		Y	8,001–9,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
		Z	9,001–10,000 lbs/Hydraulic/CargoVan/Four Door Cab/ Utility or Passenger Van
		0	9,001–10,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
		3	10,001–14,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
		6	14,001–16,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
5–6	Chassis/Series	7/A	GMC Savana, 2500 Cargo
		7/B	GMC Savana, 2500 Cargo EXT
		7/E	GMC Savana, 2500 Passenger LS
		7/F	GMC Savana, 2500 Passenger LT
		7/G	GMC Savana, 3500 Cargo
		7/H	GMC Savana, 3500 Cargo EXT
		7/L	GMC Savana, 3500 Passenger LS
		7/M	GMC Savana, 3500 Passenger LT
		7/N	GMC Savana, 3500 Passenger LS EXT
		7/P	GMC Savana, 3500 Passenger LT EXT
		7/R	GMC Savana, 3500 Cutaway 139" Wheelbase
		7/S	GMC Savana, 3500 Cutaway 159" Wheelbase
		7/T	GMC Savana, 3500 Cutaway 177" Wheelbase
		7/U	GMC Savana, 4500 Cutaway 159" Wheelbase
		7/V	GMC Savana, 4500 Cutaway 177" Wheelbase
		7/9	GMC Savana (Non-US, Non-Canada)
7	Restraint System	B	AJ3 − Active Manual Belts, Airbag − Driver only − Front
		C	AK5 − Active Manual Belts, Airbag – Driver and Passenger – Front (1st row)
		F	AK5 & ASF − Active Manual Belts, Airbags - Driver & Passenger - Front (1st row), Front Seat Side (1st row), Roof Side (All seating rows for vehicles with 3 or fewer seating rows; 1st, 2nd and 3rd row for vehicles with 4 or more seating rows)
		H	AJ3 & ASF — Active Manual belts, Airbag - Driver only - Front, Front Seat Side (1st row), Roof Side (All seating rows for vehicles with 3 or fewer seating rows; 1st, 2nd and 3rd row for vehicles with 4 or more seating rows)
8	Engine Type	P	RPO LV1 – Engine Gas, 6 CYL, 4.3L, SIDI, V6, VVT, E85 MAX, Iron
		7	mL8T - ENGINE GAS, 8 CYL, 6.6L, SIDI, VVT, CAST IRON
9	Check Digit	—	Check Digit
10	Model Year	P	2023

Vehicle Identification Number (VIN) System (cont'd)

Position	Definition	Character	Description
11	Plant Location	1	Wentzville
		N	Springfield
12–17	Plant Sequence Number	—	Plant Sequence Number

4.3L RPO LV1 Engine ID and VIN Derivative Location

Engine Identification

6.6L RPO L8T Engine ID and VIN Derivative Location

Engine Identification

6L90 (MYD) Transmission ID and VIN Derivative Location

Transmission Identification Information

8L90 (M5U) Transmission ID and VIN Derivative Location

Transmission Identification Information

Vehicle, Engine and Transmission ID and VIN Location, Derivative and Usage (Chevrolet)

5138041

The VIN plate is the legal identifier of the vehicle. The VIN plate (1) is located on the upper left corner of the instrument panel (I/P) and can be seen through the windshield from the outside of the vehicle:

Vehicle Identification Number (VIN) System

Position	Definition	Character	Description
1	Region of Build	1	United States
2	Manufacturer	G	General Motors
		H	Navistar Inc.
3	Vehicle Brand/Type	A	Chevrolet Bus (Non School Bus)
		B	Chevrolet Incomplete Truck
		C	Chevrolet Truck
		A	Chevrolet Incomplete Truck (Navistar Only)
4	GVWR/Brake System/Body Style	W	8,001–9,000 lbs/Hydraulic/Cargo Van/Four Door Cab/ Utility or Passenger Van
		Y	8,001–9,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
		Z	9,001–10,000 lbs/Hydraulic/Cargo Van/Four Door Cab/ Utility or Passenger Van
		0	9,001–10,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
		3	10,001–14,000 lbs/HydraulicCommercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
		6	14,001–16,000 lbs/Hydraulic/Commercial Special Cutaway, Two Door Cab pick-up or Motor Home Chassis
5–6	Chassis/Series	G/A	Chevrolet Express, 2500 Cargo
		G/B	Chevrolet Express, 2500 Cargo EXT
		G/E	Chevrolet Express, 2500 Passenger LS
		G/F	Chevrolet Express, 2500 Passenger LT
		G/G	Chevrolet Express, 3500 Cargo
		G/H	Chevrolet Express, 3500 Cargo EXT
		G/L	Chevrolet Express, 3500 Passenger LS
		G/M	Chevrolet Express, 3500 Passenger LT
		G/N	Chevrolet Express, 3500 Passenger LS EXT
		G/P	Chevrolet Express, 3500 Passenger LT EXT
		G/R	Chevrolet Express, 3500 Cutaway 139" Wheelbase
		G/S	Chevrolet Express, 3500 Cutaway 159" Wheelbase
		G/T	4x2, Chevrolet Express, 3500 Cutaway 177" Wheelbase
		G/U	Chevrolet Express, 4500 Cutaway 159" Wheelbase
		G/V	Chevrolet Express, 4500 Cutaway 177" Wheelbase
		G/9	Chevrolet Express (Non-US, Non-Canada)

Vehicle Identification Number (VIN) System (cont'd)

Position	Definition	Character	Description
7	Restraint System	B	AJ3 − Active Manual Belts, Airbag − Driver only − Front
		C	AK5 − Active Manual Belts, Airbag-Driver & Passenger-Front – Front (1st row)
		F	AK5 & ASF − Active Manual Belts, Airbags - Driver & Passenger - Front (1st row), Front Seat Side (1st row), Roof Side (All seating rows for vehicles with 3 or fewer seating rows; 1st, 2nd and 3rd row for vehicles with 4 or more seating rows)
		H	AJ3 & ASF - Active Manual Belts, Airbag - Driver only - Front, Front Seat Side (1st row), Roof Side (All seating rows for vehicles with 3 or fewer seating rows; 1st, 2nd and 3rd row for vehicles with 4 or more seating rows)
8	Engine Type	P	RPO LV1 – Engine Gas, 6 CYL, 4.3L, SIDI, V6, VVT, E85 MAX, Iron
		7	L8T - ENGINE GAS, 8 CYL, 6.6L, SIDI, VVT, CAST IRON
9	Check Digit	—	Check Digit
10	Model Year	P	2023
11	Plant Location	1	Wentzville
		N	Springfield
12–17	Plant Sequence Number	—	Plant Sequence Number

4.3L RPO LV1 Engine ID and VIN Derivative Location

Engine Identification

6.6L RPO L8T Engine ID and VIN Derivative Location

Engine Identification

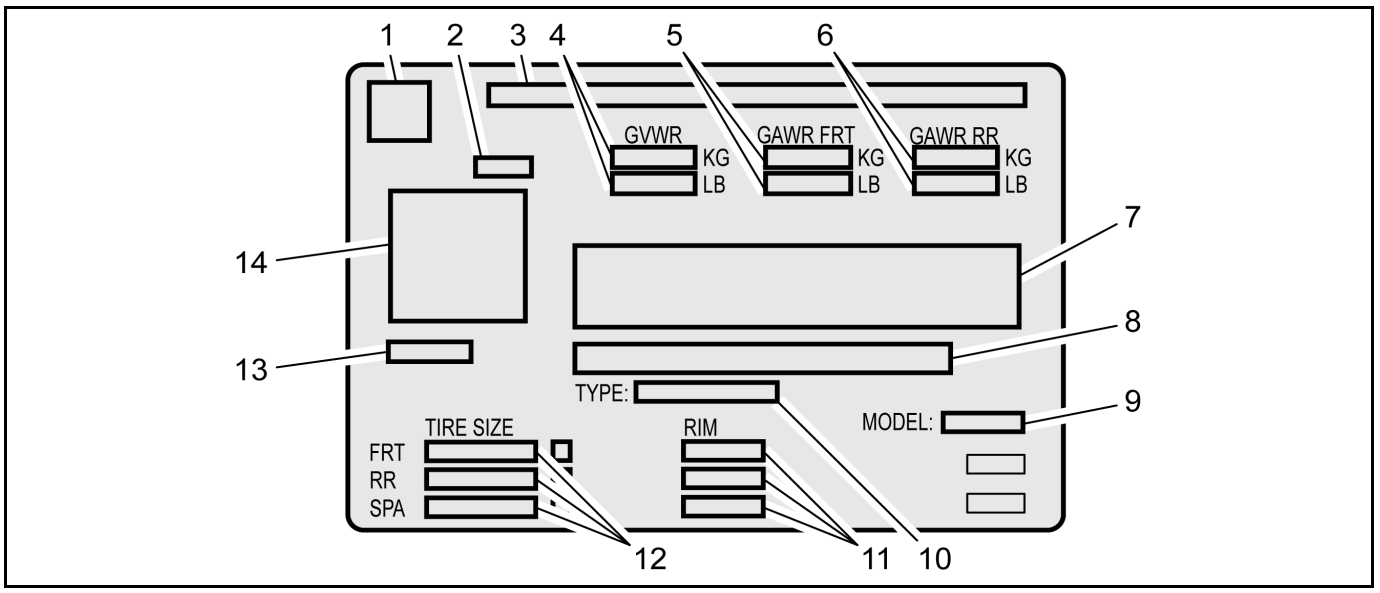
6L90 (MYD) Transmission ID and VIN Derivative Location

Transmission Identification Information

8L90 (M5U) Transmission ID and VIN Derivative Location

Transmission Identification Information

Vehicle Certification, Tire Placard, and Anti-Theft Label



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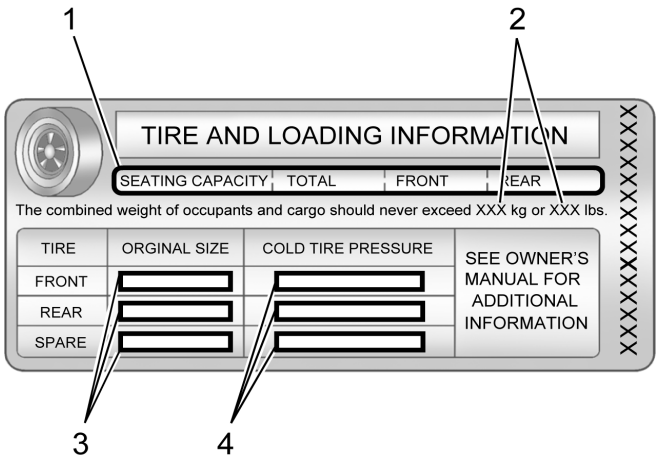
Vehicle Certification Label

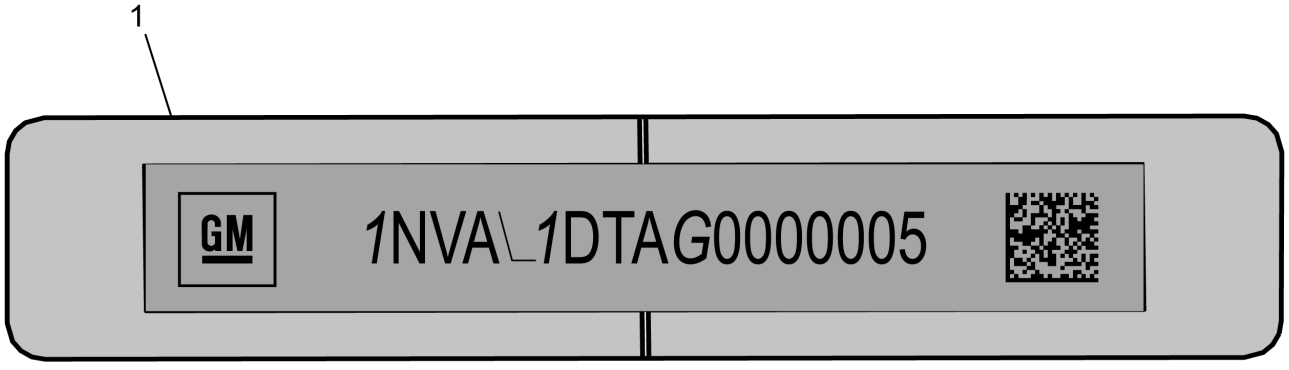
Callout	Description
A vehicle-specific Certification label is attached to the vehicle's center pillar (B-pillar) and displays the following assessments:	
1	Logo
2	Final Date of Manufacture (Month and Year MM/YY) Date of manufacture is to reflect the date that the vehicle is counted as built. In those cases where a replacement label is needed, the replacement label should reflect the actual build date not the date of replacement.
3	Name of Manufacturer
4	Maximum Gross Vehicle Weight Rating (GVWR)
5	Maximum Gross Axle Weight Rating (GAWR) - Front
6	Maximum Gross Axle Weight Rating (GAWR) - Rear
7	Certification Statement
8	Vehicle Identification Number (VIN)
9	Engineering Model Number
10	Vehicle Class Type (Pass Car, etc.)
11	Original Equipment Rim Size
12	Original Equipment Tire Size
13	Paint Code
14	QR Code Once the QR code is scanned, the information will appear in this order on your smartphone or laptop: VIN, Model Year, Model, Build Month, Year, Engineering Book, Vehicle Order Number, 3 Digit RPO Codes sorted alphanumerically and the Paint Code (same code appears the lower left of the QR code)



4962282

Tire Placard

Callout	Description
A vehicle-specific Tire and Loading Information label is attached to the vehicle's center pillar (B-pillar) and displays the following assessments:	
1	Specified Occupant Seating Positions
2	Maximum Vehicle Capacity Weight
3	Original Equipment Tire Size
4	Tire Pressure, Front, Rear, and Spare (Cold)



4962289

Anti-Theft Label

Callout	Description
This legal identifier is in the front corner of the instrument panel, on the driver side of the vehicle. It can be seen through the windshield from outside. The Vehicle Identification Number (VIN) also appears on the Vehicle Certification and certificates of title and registration.	
1	Vehicle Identification Number (VIN)

RPO Code List

The following table provides the description of the Regular Production Option (RPO) codes that are available on the vehicle. The vehicle's RPO list is printed on the Service Parts Identification Label.

RPO	Description
01U	PRIMARY COLOR-EXTERIOR, SPECIAL (02)
06Z	IDENTIFICATION-NOT EQUIPPED WITH BATTERY CURRENT SENSING
40P	WHEEL COLOR-WHITE (91)
52G	TRIM COMBINATION-CLOTH, MED NEUTRAL II (G) (00)
52I	INTERIOR TRIM-MED NEUTRAL II (I) (96)
52W	TRIM COMBINATION-VINYL, MED NEUTRAL II (W) (00)
5A1	HVAC PROVISIONS-CONTROL HEAD, RR A/C (SEO)
5AZ	ACCESSORY-SAFETY KIT - UNIVERSAL
5B6	SEAT BELT COLOR-BLACK (SEO)
5B8	COVERING FLOOR-VINYL, FRT & RR (SEO) (DUP W/B38)
5C4	SPRING-FRONT SUSPENSION, COMPUTER SELECTED, UPGRADE (SEO)
5C6	HOOK-CARGO TIE-DN
5D3	CALIBRATION-EXTENDED BATTERY RUN DOWN, INADVERENT POWER DELAY (SEO)
5F1	CALIBRATION-SUPPRESSION, ENG OIL CHANGE INDICATOR (WITH FUEL INFO) (SEO)
5F2	CALIBRATION-SUPPRESSION, ENG OIL CHANGE IND (WITHOUT FUEL INFO) (SEO)
5G0	WHEEL COLOR-BLACK (SEO)
5G8	CALIBRATION-ACTIVATION 'ON', TOW/ HAUL MODE (SEO)
5H1	KEY-SINGLE KEY SYSTEM, 2 SPARE KEYS
5H3	ORNAMENTATION-NAMEPLATE - NONE (SEO)
5H5	FIRE EXTINGUISHER-2.50 LB OR EQUIV (SEO)
5H6	KIT-SAFETY REFLECTOR TRIANGLES
5L3	PANEL-TRIM, INTERIOR (SEO)
5L5	THEFT DETERENT SYS-FLEET IMMOBILIZER MODIFICATIONS (SEO)
5Q7	PANEL-TRIM-SAIL, NONE (SEO)
5T5	SEAT OVERRIDE-(SEO)
5Z5	HUBCAPS-(NONE) (SEO)
6M2	MIRROR O/S-LH & RH, MANUAL CONTROL, AUX WFOV, SHORT ARM, COLOR (SEO)
77S	LABEL, REGULATORY-CALIFORNIA, SECTION 177 STATES
7T6	FUEL-FITTING, LINE TAKE-OFF (SEO)
8D8	MIRROR O/S-PROVISIONS ONLY, FOR AFTER MARKET POWER MIRROR (SEO)
8E1	FUEL-ADDITIONAL - 3 GALLONS (SEO)
8E9	BUMPER FRT-PAINTED, WHITE (SEO)
8G8	LAMP-CARGO OVERHEAD LED (SEO)
8N2	SEAT BELT COLOR-ORANGE (SEO)
8R2	VALVE-LONG STEM, 3 3/8 IN (SEO)
8R3	VALVE-METAL (SEO)
8R7	FUEL TANK FILLER-NECK, LOWERED (FOR 96 INCH BODY WIDTH) (SEO)
8S3	ALARM B/U-ELECTRICAL, 97 DECIBELS (SEO)
8S8	WIRING PROVISIONS-ODOMETER SECURITY (SEO)
8T2	WIRING PROVISIONS-RH DOOR DELETE (SEO)
8X8	LABEL INFORMATION-LABEL, FASTEN SEAT BELTS (SEO)
93B	TRIM COMBINATION-CLOTH, JET BLACK/ MED DK PEWTER (SEO)
93G	TRIM COMBINATION-CLOTH, MED DK PEWTER II (G) (03) (GMT610 - "G" VAN)
93I	INTERIOR TRIM-MED DK PEWTER II (03) (GMT610 - "G" VAN)
93W	TRIM COMBINATION-VINYL, MED DK PEWTER II (W) (03) (GMT610 - "G" VAN)
9B4	CAP-FUEL FILL, W/STAINLESS TETHER (SEO)
9B9	GOVERNOR-VEHICLE TOP SPEED LIMIT - 70 MPH (SEO)
9C2	GOVERNOR-VEHICLE TOP SPEED LIMIT - 65 MPH (SEO)
9C7	CAP-COOLANT RECOVERY BOTTLE WITH TETHER (SEO)
9D7	GOVERNOR-VEHICLE TOP SPEED LIMIT - 75 MPH (SEO)
9E9	GVW RATING-8,600 LBS (SEO)
9EL	GOVERNOR-VEHICLE TOP SPEED LIMIT - 95 MPH

RPO	Description
9J6	STEERING COLUMN-TILT TYPE (SEO)
9L7	EQUIPMENT-ACSRY WRG JUNC BLK
9Q4	SPRING REAR-LOWERED (SEO)
9R5	SPRING REAR-RECREATIONAL VEHICLE (SEO)
9T7	DOOR-RH - NONE (SEO)
9V5	COLOR-WOODLAND GREEN (SEO)
9W3	COLOR-WHEATLAND YELLOW, LEAD FREE (SEO)
9W4	COLOR-TANGIER ORANGE, LEAD FREE (SEO)
A07	WINDOW-BODY
A08	WINDOW-BODY, RH
A12	WINDOW RR-DR, STA
A13	WINDOW SIDE DR-RR, STA
A17	WINDOW SIDE BODY-SWING OUT, LH
A18	WINDOW RR-DR, SWING OUT
A19	WINDOW SIDE DR-RR, SWING OUT
A31	WINDOW-POWER OPERATED, ALL DOORS
ACO	IDENTIFICATION-ACCESSORY CATALOG OFFERING
AG1	ADJUSTER FRT ST-POWER, MULTI-DIRECTIONAL, DRIVER
AG2	ADJUSTER PASS ST-POWER, MULTI-DIRECTIONAL
AJ1	WINDOW TINTED-DEEP, ALL EXCEPT W/S AND DRS
AJ3	RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER, FRT
AJW	WINDOW STYLE-LAMINATED
AK5	RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER & PASS FRT
ANC	SALES PACKAGE-SHUTTLE BUS
AR7	SEAT-FRT BKT, STANDARD
AS5	SEAT-FRT BKT, DELUXE,
ASB	EQUIPMENT-SECURITY BAR, REAR SIDE DOOR
ASF	RESTRAINT-ROOF SIDE (LH & RH), SEAT SIDE (FRONT 1ST ROW), INFLATABLE
AT8	RESTRAINT PROVISIONS-CHILD, RR SEAT, RR FACING
ATG	LOCK CONTROL, ENTRY-REMOTE ENTRY, STANDARD RANGE
AU3	LOCK CONTROL-SIDE DR, ELEC
AXK	VEHICLE TYPE-TRUCK
AXW	VEHICLE TYPE-BUS- (NOT SCHOOL BUS)
B30	COVERING FLOOR-CARPET
B31	COVERING FLOOR-VINYL, FRT, FULL WIDTH
B32	COVERING FRT-FLOOR MATS, AUX
B33	COVERING REAR-FLOOR MATS, AUX

RPO	Description
B38	COVERING FLOOR-VINYL, FRT & RR, FULL WIDTH
B3D	SALES PACKAGE-SCHOOL BUS
BA0	ORNAMENTATION-EXTR, DOOR, NAMEPLATE
BA3	COMPARTMENT-STOWAGE, I/P LOWER EXTENSION DELUXE
BAG	PARTS PKG-EXPORT
BNC	PARTS PKG-BODY MOUNT CUSHIONS
BTV	REMOTE START-VEHICLE
BUE	KIT-EXHAUST DIESEL
C36	HEATER-AUXILIARY
C42	HVAC SYSTEM-HEATER, OUTSIDE AIR, DELUXE
C49	DEFOGGER-RR WINDOW, ELECTRIC
C4K	GVW RATING-9,925 LBS
C4M	GVW RATING-9,900 LBS/4,500 KG
C60	HVAC SYSTEM-AIR CONDITIONER FRT, MAN CONTROLS
C69	HVAC SYSTEM RR-AIR CONDITIONER
C6P	GVW RATING-8,600 LBS/3,900 KG
C6Y	GVW RATING-9,600 LBS
C7I	GVW RATING-14,200 LBS.
C7N	GVW RATING-12,300 LBS
C99	SWITCH-INFL RST I/P MDL MAN SUPPRESSION
CGN	LINER-PUBX, SPRAY ON
CK2	COUNTRY-YEMEN
CU7	COUNTRY-KUWAIT
CU8	COUNTRY-SAUDI ARABIA
CV3	COUNTRY-MEXICO
CV4	COUNTRY-ISRAEL
CV8	COUNTRY-IRAQ
CX9	COUNTRY-LEBANON
CY2	COUNTRY-JORDAN
D28	MIRROR O/S-(-NONE)
D2O	COUNTRY-CURACAO
D31	MIRROR I/S R/V-TILT
D3J	COUNTRY-CAYMAN ISLANDS
D3K	COUNTRY-DOMINICAN REPUBLIC
D3L	COUNTRY-EL SALVADOR
D3M	COUNTRY-GUATEMALA
D3P	COUNTRY-HAITI
D3Q	COUNTRY-HONDURAS
D3S	COUNTRY-QATAR
D3U	COUNTRY-ST MAARTEN
D4C	COUNTRY-BAHRAIN
D4G	COUNTRY-BAHAMAS
D4N	COUNTRY-COSTA RICA

RPO	Description
D4X	COUNTRY-ARUBA
D5D	COUNTRY-NICARAGUA
D5P	COUNTRY-UNITED ARABIC EMIRATES
DAA	SUNSHADE-VINYL
DE5	MIRROR O/S-LH & RH, REMOTE CONTROL, ELECTRIC, HEATED, FOLDING, COLOR.
DEE	MIRROR O/S-LH & RH, REMOTE CONTROL, ELECTRIC, HEATED, MANUAL FOLDING, TURN SIG IND, (SEO)
DH6	MIRROR I/S FRT VAN-LH & RH, SUNSHADE, ILLUM
DHC	MIRROR O/S-LH & RH, MANUAL CONTROL, AUX WFOV, COLOR
DNS	EQUIPMENT-SUPPLIER INSTALLED
DPU	COUNTRY-BONAIRE
DRJ	MIRROR I/S R/V-TILT, PARTIAL VIDEO DISPLAY
DSB	EQUIPMENT-SECURITY BAR DELETE, REAR SIDE DOOR
E24	DOOR SIDE-REAR, HINGED
E6H	COUNTRY-OMAN
EF5	COUNTRY-PANAMA
EF7	COUNTRY-UNITED STATES OF AMERICA (USA)
ENC	HVAC PROVISIONS-AUXILLIARY HEATER PLUMBING & WIRING
EXP	EXPORT-
FE9	CERTIFICATION-EMISSION, FEDERAL
FHO	VEHICLE FUEL-GASOLINE E10
FHS	VEHICLE FUEL-GASOLINE E85
G7C	PRIMARY COLOR-EXTERIOR, PULL ME OVER RED SOLID (130X)
G7K	EQUIPMENT-ANTENNA, CABLE AND GROUNDPLATE
G80	AXLE POSITRACTION-LIMITED SLIP
GAN	PRIMARY COLOR-EXTERIOR, SWITCHBLADE SILVER MET (G) 636R
GAZ	PRIMARY COLOR-EXTERIOR, SUMMIT WHITE (G) 8624
GBA	PRIMARY COLOR-EXTERIOR, BLACK (G) 8555
GT4	AXLE REAR-3.73 RATIO
GT5	AXLE REAR-4.10 RATIO
GU6	AXLE REAR-3.42 RATIO
IVR	VEHICLE-VRIDE
J23	ENGINEERING YEAR-2023
JFF	GVW RATING-10,100 LBS
JH6	BRAKE-HYD POWER, 4 WHL DISC.
JH9	BRAKE-HYD POWER, 4 WHL DISC, 14, 200 LBS
JL4	CONTROL,-ACTIVE BRAKE

RPO	Description
K05	HEATER ENG-BLOCK
K34	CRUISE CONTROL-AUTOMATIC, ELECTRONIC
K50	FUEL-FITTING, LINE TAKE-OFF
K68	GENERATOR-105 AMP
KC4	COOLING SYSTEM-ENG OIL
KD1	COOLING SYSTEM-TRANS, OIL
KG4	GENERATOR-150 AMP
KI4	RECEPTACLE I/P-ELECTRICAL, 110 VOLT
KUP	THROTTLE CONTROL-ELECTRONIC
KW5	GENERATOR-220 AMP
KYK	GOVERNOR-VEHICLE TOP SPEED LIMIT - 100 KPH
L8T	ENGINE-GAS, 8 CYL, 6.6L, SIDI, VVT, CAST IRON
LV1	ENGINE-GAS, 6 CYL, 4.3L, GEN 5, SIDI, V6, VVT, OHV, ALUM
M5U	TRANSMISSION-AUTO 8 SPD, 8L90
MTF	PROVISIONS-FIRE EXTINGUISHER MOUNTING
MYD	TRANSMISSION-AUTO 6 SPD, HMD, 6L90
N33	STEERING COLUMN-TILT TYPE
NAV	PLANT CODE-NAVISTAR, SPRINGFIELD, OH, USA
NCF	LOCK-CHILD SECURITY FEATURE - NONE
NE1	CERTIFICATION-EMISSION, GEOGRAPHICALLY RESTRICTED REGISTRATION
NE7	FUEL TANK-216L, 57 GAL
NE8	EVAPORATIVE SYSTEM-LEVEL 3 EMISSIONS
NHT	PERFORMANCE PACKAGE-ENHANCED TOWING
NP5	STEERING WHEEL-LEATHER WRAPPED
NPL	PLATE-NAME - NONE
NTB	EMISSION SYSTEM-FEDERAL, TIER 3
NU9	EMISSION SYSTEM-CALIFORNIA, ULEV200
NUM	EMISSION SYSTEM-CALIFORNIA, LEV3 MDV 10-14K GVW
P03	COVER, WHEEL-VAR 3
PNC	PANEL-TRIM, FRT DOORS & SI RR DOOR(S) & RR DOORS
PPC	PANEL-TRIM, RR DOORS
PSR	RESERVOIR-POWER STEERING FLUID, WITH LEVEL SIGHT (SEO)
Q8C	CAP-VALVE, TIRE, AIR-THRU (SEO)
QB5	WHEEL-16 X 6.5, J, STEEL
QT4	WHEEL-16 X 6.5, STEEL H.D.
R04	WHEEL CONFIGURATION-RR, SINGLE
R05	WHEEL CONFIGURATION-RR, DUAL

RPO	Description
R25	APPEARANCE PACKAGE-EXTERIOR, CHROME GRILLE & PAINTED BUMPER
R26	APPEARANCE PACKAGE-EXTERIOR, CHROME GRILLE & FRONT BUMPER
RDI	ACCESSORY-KEYLESS ENTRY
RGI	ROUTING GROMMET-UPFITTER, FRONT OF DASH (SEO)
RVG	ACCESSORY-ADAPTER - TRAILER HARNESS
RYT	ACCESSORY-FIRST AID KIT
RYY	ACCESSORY-FLOOR MATS - MOLDED VINYL
RZW	ACCESSORY-HARNESS - TRAILER HITCH
S08	ACCESSORY-HIGHWAY SAFETY KIT
S52	ACCESSORY-MOLDED HOOD PROTECTOR - SMOKED
S6N	ACCESSORY-RECEIVER COVER - TRAILER HITCH
SDD	ACCESSORY-TRAILER HITCH - FIXED
SDI	ACCESSORY-TRIANGLE - REFLECTIVE
SDS	ACCESSORY-WEATHER DEFLECTORS - SIDE WINDOW - SMOKED
SFE	ACCESSORY-WHEEL LOCKS
SFV	ACCESSORY-WIRELESS NETWORK INTERFACE MODULE
T74	CONTROL, HEADLAMPS-AUTOMATIC, DELAY
TGA	LANGUAGE CONTROL-ENGLISH, FRENCH, SPANISH
TGG	LANGUAGE CONTROL-ENGLISH, ARABIC, FRENCH
TP3	BATTERY-770 CCA & 770 CCA (DUAL)770 CCA & 770 CCA (DUAL)
TR9	LAMP GROUP-
U05	HORN-DUAL
U0F	RADIO-AM/FM STEREO, CAF, RSA, MUSIC NAVIGATOR, GRAPHICS
U0H	RADIO-AM/FM STEREO, USB, GMNA
U19	SPEEDOMETER-INST, KILO & MILES, KILO ODOMETER
U2J	DIGITAL AUDIO SYSTEM-S-BAND - NONE
U2K	DIGITAL AUDIO SYSTEM-S-BAND
U73	ANTENNA-FIXED, RADIO
U80	DISPLAY-COMPASS
UA1	BATTERY-HIGH CAPACITY, WET
UA7	THEFT DETERENT SYS-EXPORT SPECIFIC, VAR #02
UC2	SPEEDOMETER-INST, KILO & MILES, KILO ODOMETER, POSITIVE BIAS
UD4	ALARM-VEHICLE SPEED, 120 K/H (DON'T USE AFTER 2010 ON NEW MAJORS - USE CTY COD &/OR VCS FAM COD INSTEAD)
UD7	PARK ASSIST-REAR

RPO	Description
UE0	COMMUNICATION SYSTEM-VEHICLE - NONE
UE1	COMMUNICATION SYSTEM-VEHICLE, ONSTAR
UEU	SENSOR INDICATOR-FORWARD COLLISION ALERT
UF3	SWITCH-HIGH IDLE
UFA	DISPLAY-OUTSIDE TEMPERATURE
UFL	LANE ACTIVE SAFETY-DEPARTURE WARNING
UFT	SIDE ACTIVE SAFETY-OBSTACLE DETECTION
UJ1	INDICATOR-SYSTEM, BRAKE WARNING
UJM	TIRE PRESS INDICATOR-MANUAL LEARN
UL2	FREQUENCIES-EUROPEAN
UL8	FREQUENCIES-SAUDI ARABIAN
UPF	WIRELESS INTERFACE-SHORT RANGE, VOICE REC
USR	RECEPTACLE-USB
UTJ	THEFT DETERENT-ELECTRICAL, UNAUTHORIZED ENTRY
UTN	PROVISIONS-UPFITTER CONTROL AND MONITORING
UVC	VISION-REAR VIEW, MONO, ANALOG
UY7	WIRING HARNESS-TRUCK TRAILER, HD
V10	PROVISION OPTIONS-COLD WEATHER
V22	GRILLE-RADIATOR, CHROME
V37	BUMPER-FRT & RR, CHROME
V46	BUMPER FRT-CHROME
V4D	CALIBRATION-SEPARATED STOP/TURN SIGNAL CIRCUITS
V78	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - NO CERT STATEMENT (ENGLISH TEXT)
V87	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - GULF STATES ORGANIZATION
V8C	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - NO CERT STATEMENT (SPANISH TEXT)
V8D	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - U.S. FMVSS
V8E	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - CANADA CMVSS
V8I	VEHICLE STATEMENT-VEHICLE LABEL CONTENT - ISRAEL FMVSS
VBX	LANGUAGE LABEL-ARABIC
VC5	LABEL-SHIPPING, EXCEPT US, US POSSESSIONS, OR JAPAN
VG8	VEHICLE-LABEL, NOTICE TO BUYER
VH6	BUMPER FRT-BLACK
VJG	BUMPER RR-BLACK
VK3	LICENSE PLATE FRONT-FRT MOUNTING PKG

RPO	Description
VK5	SEAT-TEMPORARY, FOR SHIPPING
VLU	ACCESSORY-SECURITY SCREEN PACKAGE - REAR WINDOW W/O POP - OUT
VP6	NOISE CONTROL-
VPH	VEHICLE PREPARATION-OVERSEAS DELIVERY
VQK	ACCESSORY-SPLASH GUARDS - CUSTOM MOLDED
VR4	TRAILER HITCH-WEIGHT DISTRIBUTING PLATFORM
VR6	HOOK-TIE-DN SHPG
VT7	OWNERS MANUAL-ENGLISH LANGUAGE
VV4	COMMUNICATION EQUIP-MOBILE INTERNET CONNECTIVITY
VXT	VEHICLE TYPE-INCOMPLETE
VXW	ACCESSORY-ASSIST STEPS - MOLDED
W1Y	CONTROL-STEERING WHEEL, RADIO, REDUNDANT CONTROLS
WEN	PLANT CODE-WENTZVILLE, MO, USA
WMX	VIN MODEL YEAR-2023
X88	MARKET BRAND-CHEVROLET
XHF	TIRE FRONT-LT225/75R16 E 115/112 S BL ALS
XL7	FREQUENCIES RATING-315 MHZ, LONG DISTANCE
XL8	FREQUENCIES RATING-433 MHZ
XLP	TIRE FRONT-LT245/75R16 E 120/116 S BW ALS
Y3H	SALES PACKAGE-HANDICAPPED, MOBILITY, PARATRANSIT
YA2	DOOR SIDE-REAR, SLIDING DOOR, MANUAL
YB9	PAINT PROCESS-INTERIOR - NONE
YC6	PACKAGE, CONVENIENCE-DECOR LEVEL #6
YF1	SALES PACKAGE-CUTAWAY UPFITTER
YF2	SALES PACKAGE-AMBULANCE UPFITTER
YF5	CERTIFICATION-EMISSION, CALIFORNIA
YHF	TIRE REAR-LT225/75R16 E 115/112 S BL ALS
YK6	IDENTIFICATION-(SEO)
YLP	TIRE REAR-LT245/75R16 E 120/116 S BW ALS
YM8	IDENTIFICATION-LIMITED PERSONALIZATION OPTION (LPO)
Z49	COUNTRY-CANADA
Z82	TRAILER PROVISIONS-SPECIAL EQUIPMENT, H.D.
Z88	MARKET BRAND-GMC
ZHF	TIRE SPARE-LT225/75R16 E 115/112 S BL ALS

RPO	Description
ZLP	TIRE SPARE-LT245/75R16 E 120/116 S BW ALS
ZP0	SEATING ARRANGEMENT-TEMPORARY DRIVER
ZP3	SEATING ARRANGEMENT-15 PASS
ZP6	SEATING ARRANGEMENT-5 PASS CARGO
ZQ2	SALES PACKAGE-DRIVER CONVENIENCE
ZQ3	SALES PACKAGE-DRIVER CONVENIENCE II
ZR7	APPEARANCE PACKAGE-GRILLE & BUMPER CHROME
ZW1	WINDOW PKG-RH SIDE RR DRS (SEO)
ZW2	WINDOW PKG-RR DRS
ZW3	WINDOW PKG-RR DRS, SIDE RR DR
ZW4	WINDOW PKG-RH SIDE, RR DRS
ZW6	WINDOW PKG-COMPLETE BODY
ZW9	BODY EQUIPMENT-BASE BODY OR CHASSIS
ZX1	SEATING ARRANGEMENT-DRIVER ONLY, HIGH BACK
ZX2	SEATING ARRANGEMENT-DRIVER & PASS, HIGH BACK
ZX5	SEATING ARRANGEMENT-12 PASS
ZX9	TIRE SPARE-W/WHEEL - NONE

Section 2

Body Systems

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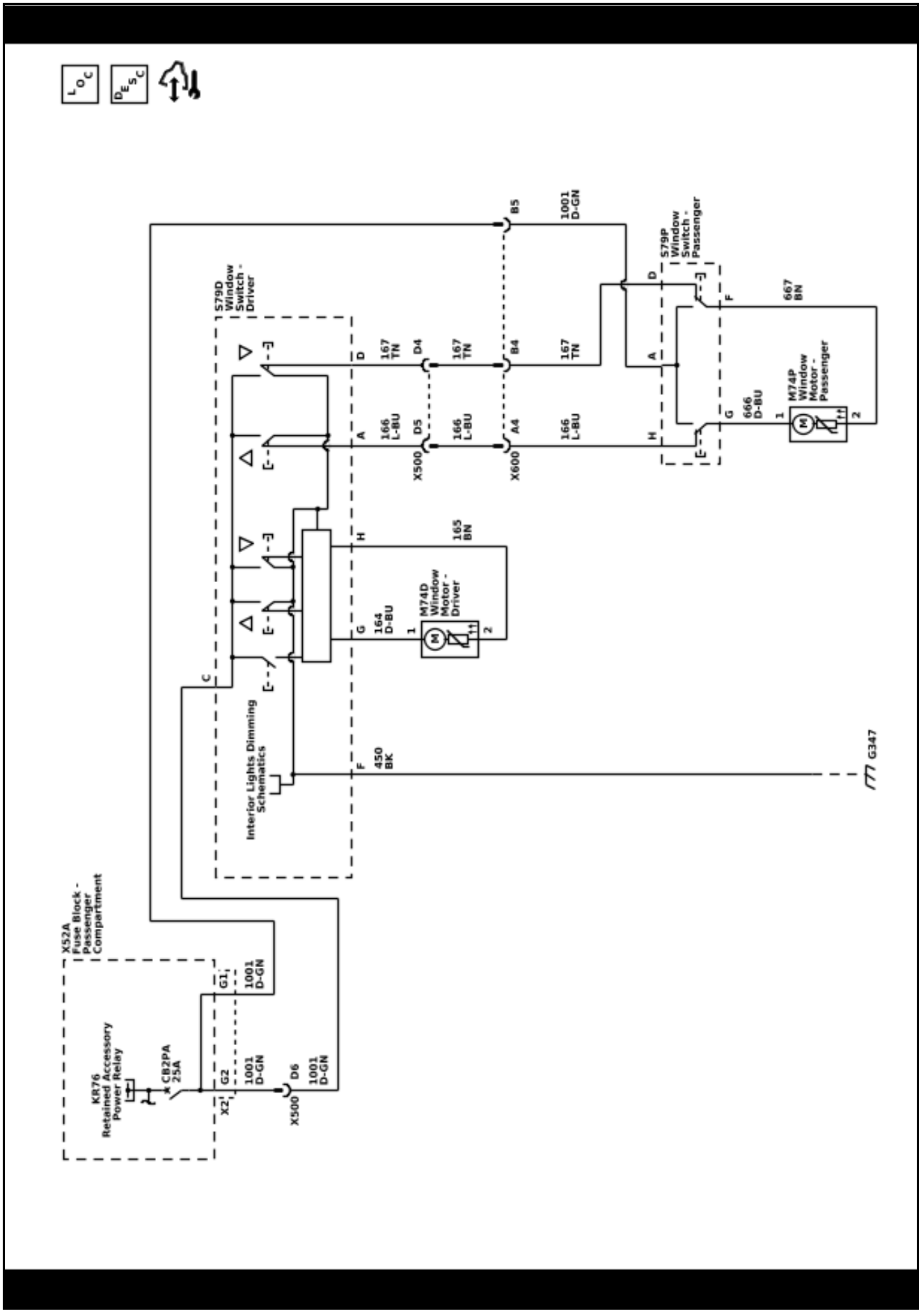
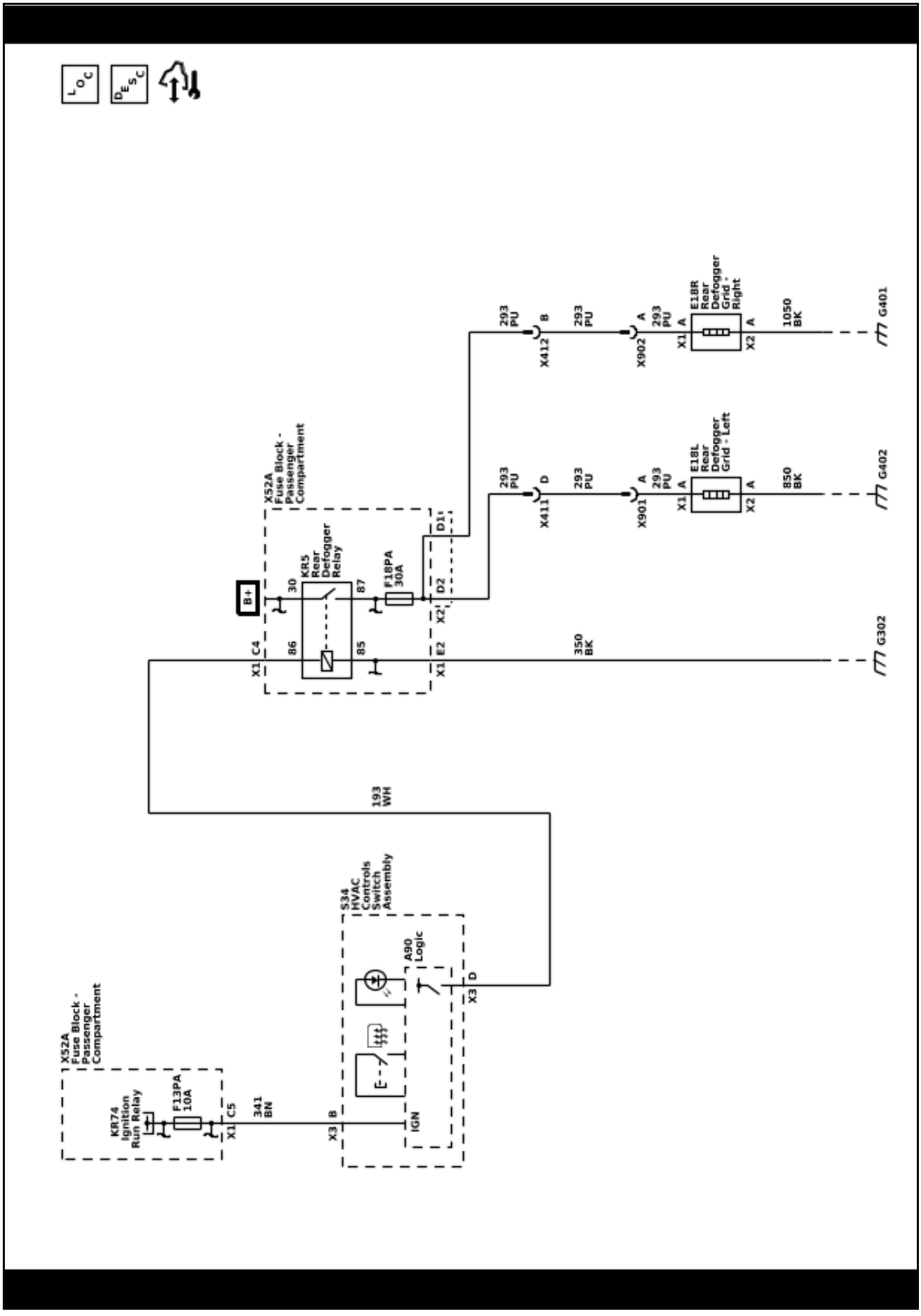
Fixed and Moveable Windows

Schematic and Routing Diagrams

Moveable Window Schematics (Moveable Windows (A31))



Defogger Schematics (Defogger (C49))



Description and Operation

Full-Cut Method Description

Important:

- If corrosion of the pinch-weld flange is present, or if sheet metal repairs or replacements are required, refinish the pinch-weld flange in order to present a clean, primer-only surface.
- If paint repairs are required, mask the flange bonding area, prior to applying the color coat, in order to provide a clean, primer-only surface.
- Appropriate materials for these primer applications are typically 2 component catalyzed products. Use materials such as BASF DE15®, DuPont 2610®, Sherwin-Williams PSE 4600 and NP70® and Martin-Semour 5120 ,5130® , PPG DP90LF SPIES/HECKER 3688/8590 – 3688/5150 – 4070/5090 STANDOX 11158/13320 – 14653/14980 products are approved for this application. Follow the manufacturer's directions for the mix, the application, and the drying times.
- After repairing the opening as indicated, use adhesive systems which meet GM Specification GM 3651G.

Use only the full cut method, also known in the field as full strip method, when installing windows.

This method includes the following:

- The replacement of a majority of the adhesive bead. Remove all but approximately 2 mm (3/64 in) of the existing bead of adhesive from the pinch-weld flange.
- Apply pinch-weld primer to any exposed painted areas on the pinch-weld flange.

No mounds or loose pieces of adhesive should remain on the pinch-weld flange. Do not remove all traces of adhesive.

Power Windows Description and Operation

Power Window System Components

The power window system consists of the following components:

- LF power window master switch
- RF power window switch
- Reversible power window motors in each of the doors (circuit breaker protected)
- PWR WNDW 25A circuit breaker

Power Window System Controls

The power window system will operate anytime the ignition switch is in the ACCY or ON position or when RAP is activated.

The LF power window master switch can control the up and down functions of both the windows in the vehicle. The passenger door power window switch can only control the up and down functions of the passenger window.

Power Window Motor Operation

A permanent magnet motor operates each of the power side windows. Each motor raises or lowers the glass when the motor receives voltage. The direction the motor turns depends on the polarity of the supply voltage. The power window switches control the polarity of the supply voltage. A built-in circuit breaker protects each motor. The circuit breaker opens when the switch is depressed for a extended period of time under the following conditions:

- The window has an obstruction.
- The window is fully open or fully closed.

The circuit breaker will reset automatically as the circuit breaker cools.

Power Window Operation

The normally closed contacts of the switch are connected to ground and the center pole is connected to the accessory voltage circuit. By placing the left power window switch in the down position, voltage is applied to the power window motor left front down circuit and to the power window motor. The other side of the power window motor is connected to ground through the normally closed contacts of the left power window switch through the power window motor left front up circuit and drives the window down.

By placing the power window switch in the up position the polarity of the motor is reversed and the motor drives the window up.

Rear Window Defogger Description and Operation

Rear Window Defogger System Components

The rear window defogger system consists of the following components:

- HVAC control assembly
- Rear window defogger relay
- Rear window defogger grid

Rear Window Defogger Operation

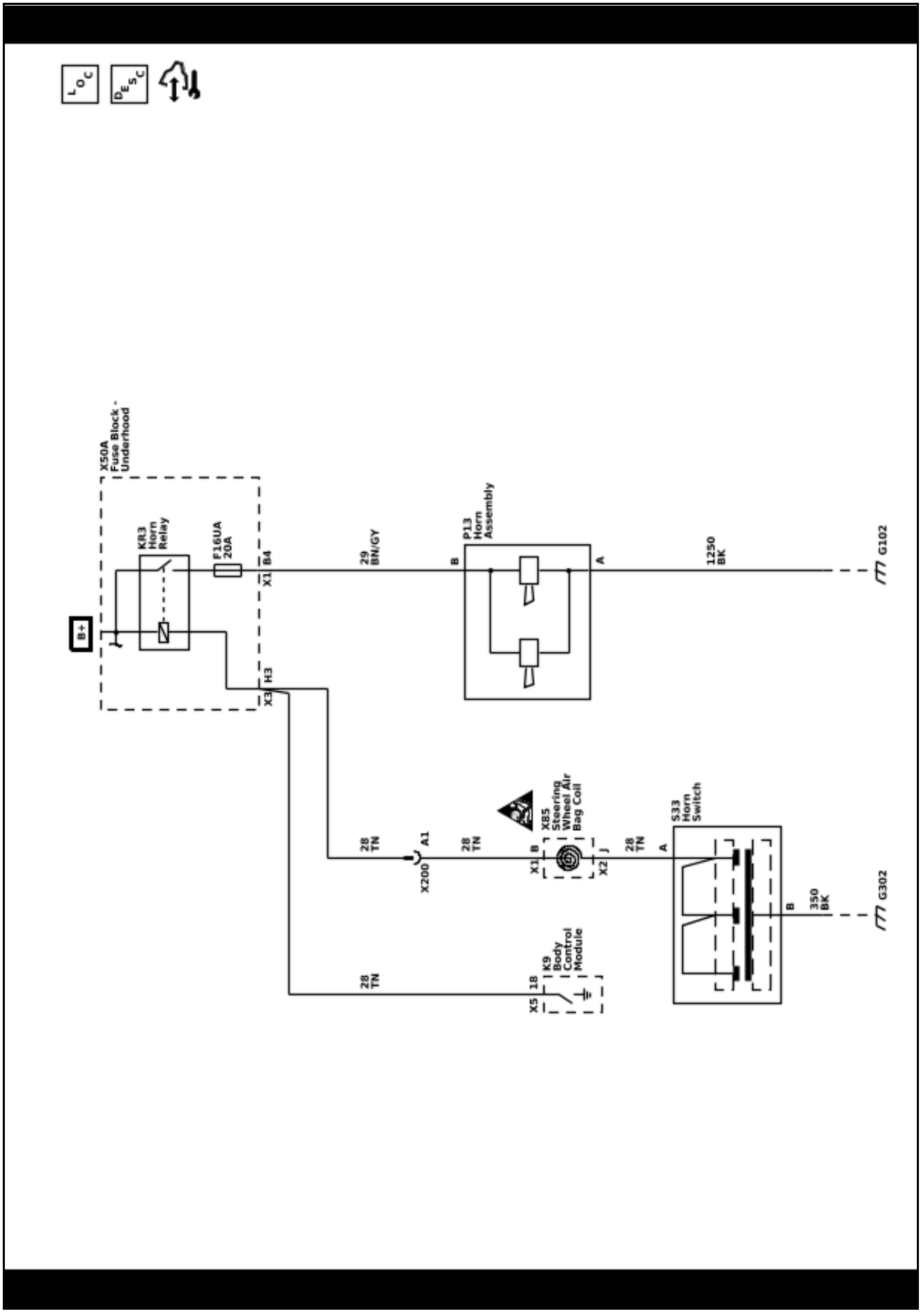
When you turn the ignition to the ON position, battery positive voltage is supplied through the HTD MIR DEFOG fuse to the rear window defogger relay switched input. Ground is for the rear window defogger relay coil is provided by G302. Battery positive voltage and ignition voltage is supplied to the HVAC control assembly for rear window defogger operation. When the rear window defogger switch is depressed, the HVAC control assembly energizes the rear window defogger relay by supplying battery positive voltage to the rear window defogger relay coil. This allows battery positive voltage from the relay switched input through the switch contacts and out the relay switched output to the rear window defogger grids. The HVAC control assembly also illuminates the rear window defogger indicator upon this request. Ground for the left rear window defogger grid is provided by G401. Ground for the right rear window defogger grid is provided by G402.

When you turn ON the ignition and press the rear window defogger switch for the first time, the defogger cycle lasts 10 minutes. Further operation results in 5 minute defogger cycles. The defogger cycle resets to 10 minutes when you cycle the ignition to the OFF position and then back to the ON position.

Horns and Pedestrian Alerts

Schematic and Routing Diagrams

Horn Schematics (Horn Schematics)



Description and Operation

Horns System Description and Operation

System Description

The horn system consists of the following components:

- The HORN fuse
- The Horn relay
- The Horn Contact
- The Horn Assembly
- Body Control Module (BCM)

System Operation

- The vehicle horns are activated whenever the horn switch is depressed.
- The BCM commands the horns ON under any of the following conditions:
  - When the panic button is depressed on the remote control door lock transmitter. For further information refer to *Keyless Entry System Description and Operation on page 7-13*.
  - When the keyless entry system is used to lock the vehicle, a horn chirp may sound to notify the driver that the vehicle has been locked. The notification feature may be enabled or disabled through personalization. For further information refer to *Keyless Entry System Description and Operation on page 7-13*.

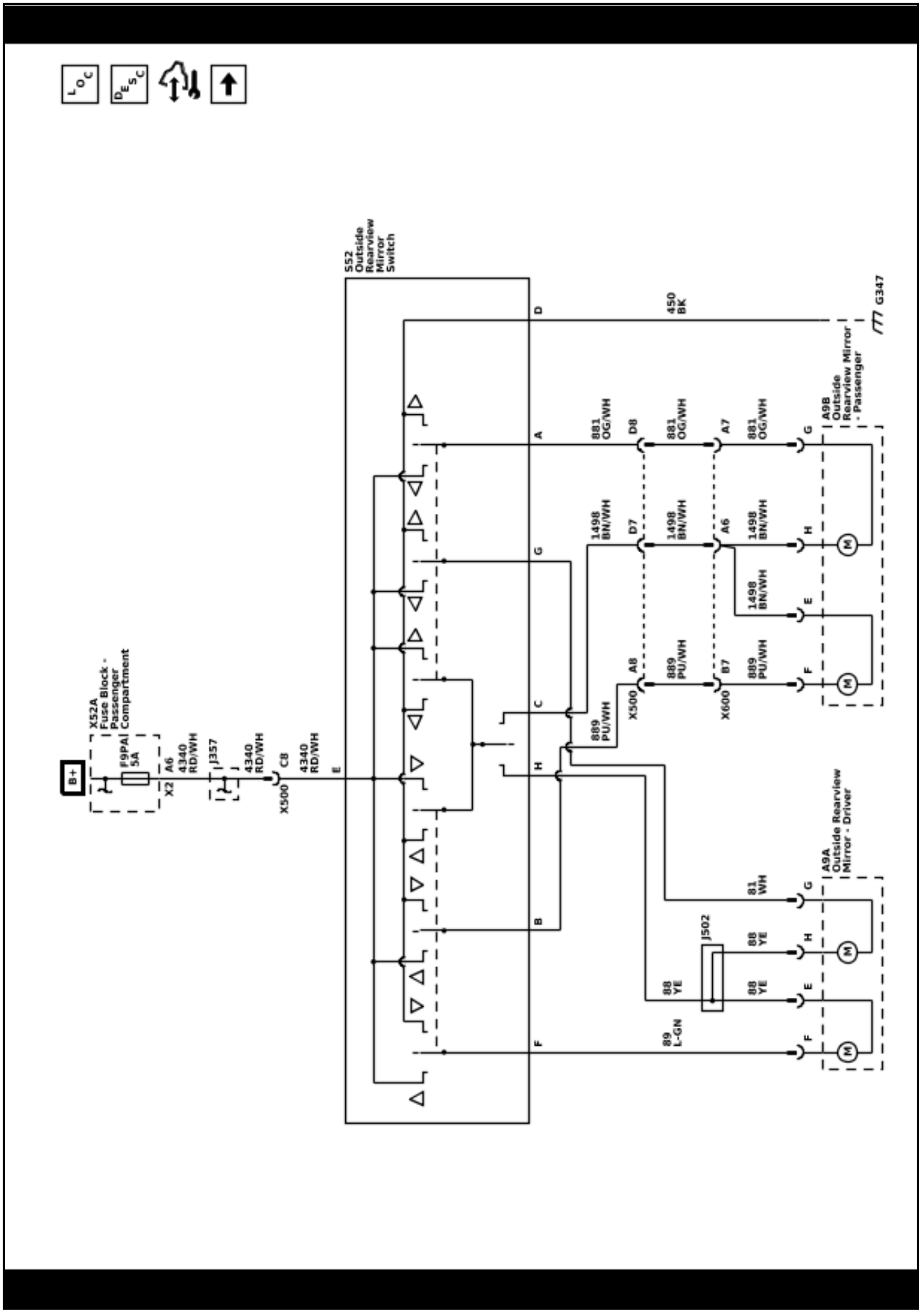
Circuit Operation

Battery positive voltage is applied at all times to the horn relay coil and the horn relay switch. Pressing the horn switch applies ground to the horn relay control circuit. When the horn relay control circuit is grounded, the horn relay is energized and battery positive voltage is applied to the horns through the horn control circuit. The horns sound as long as ground is applied to the horn relay control circuit.

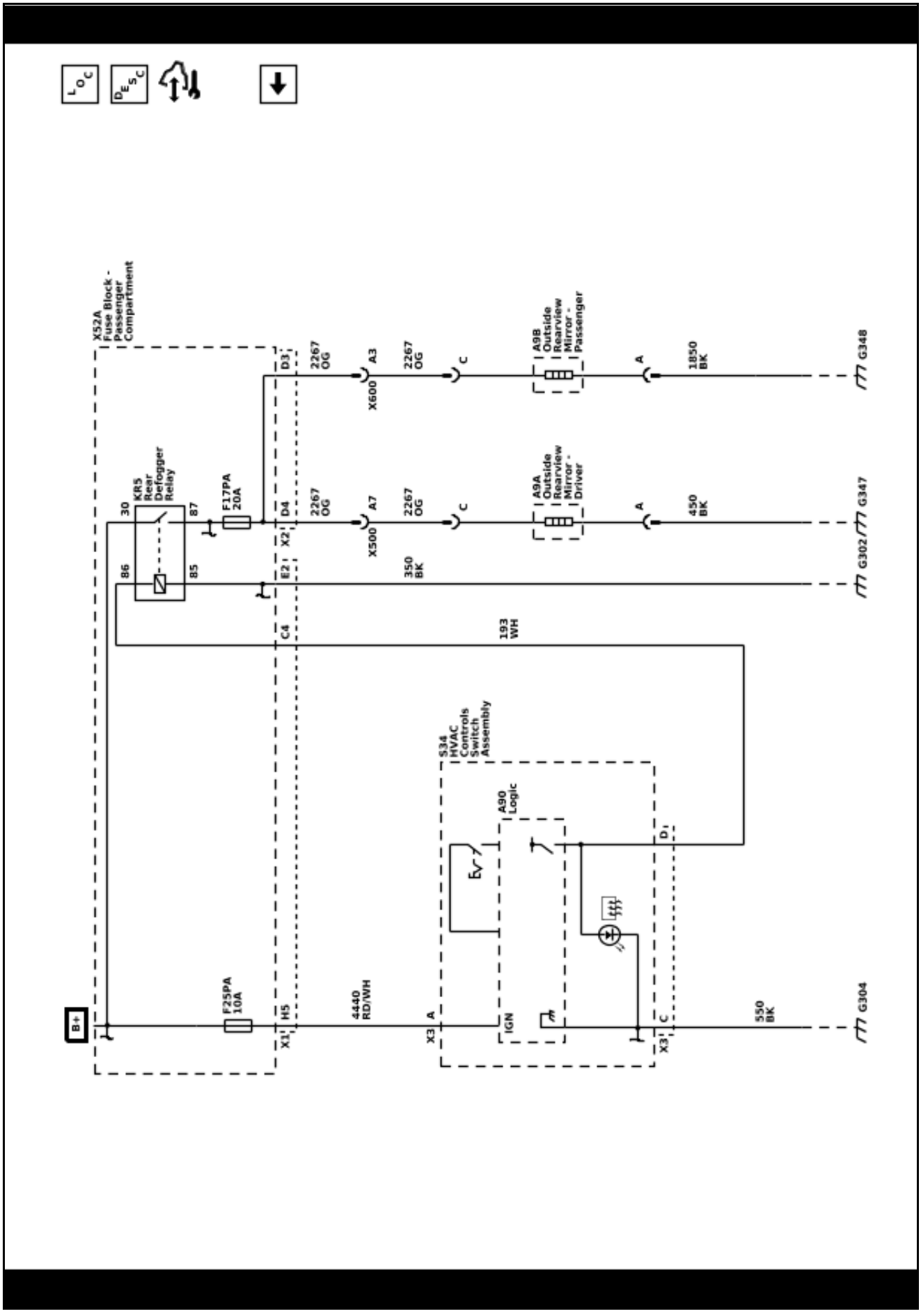
Mirrors

Schematic and Routing Diagrams

Outside Rearview Mirror Schematics (Pan and Tilt (DE5))



Outside Rearview Mirror Schematics (Heated Mirrors (DE5))



Description and Operation

Outside Mirror Description and Operation

Outside Mirror System Components

The power mirror system consists of the following components:

- Power mirror switch
- Selector switch
- Left outside power mirror
- Right outside power mirror
- OSRVM 10A fuse
- HVAC control module
- Left outside power mirror
- Right outside power mirror

Each of the outside power mirrors contains two reversible motors. The vertical motor operates the up and down directions and the horizontal motor operates the left and right directions. Each of the power mirror motors are circuit breaker protected.

Power Mirror System Controls

The power mirror switch incorporates a mirror select switch and a four position mirror direction switch.

The mirror select switch allows the operator to select the mirror to be moved by rotating counterclockwise to the L position, left outside power mirror, or rotating clockwise to the R position, right outside power mirror.

The mirror direction switch is a 4 position switch that allows the operator to move the selected mirror up, down, left or right.

Power Mirror System Operation

The power mirror switch receives power through the battery supply voltage circuit and the OSRVM fuse. The power mirror switch also receives a constant ground.

The four positions of the direction switch have dual switch contacts. Each of the contacts are connected to opposing sides of the appropriate power mirror motors through the selector switch. The selector switch interrupts or completes these circuits depending on the position of the selector switch (L or R).

If the selector switch is placed in the L position and the up switch is depressed, battery voltage will be supplied to the left outside power mirror vertical motor through the left mirror motor up direction circuit and return to the power mirror switch through the mirror motor common circuit then to ground and the mirror will move up. If the down switch is depressed, the common circuit supplies battery voltage and the left mirror motor up direction circuit completes the path to the power mirror switch then to ground and the mirror will move down.

The remainder of the mirror functions operate in the same manner as described above. The thing to remember is, that by placing the power mirror switch in opposing positions (left/right or up/down) will reverse the polarity of the mirror motor, utilizing the same circuits and the power mirror will move accordingly.

Heated Mirror System Controls

The heated mirror system is activated by depressing the rear window defogger switch, which is part of the HVAC control module. For further information on the rear window defogger operation, refer to *Rear Window Defogger Description and Operation on page 2-6*.

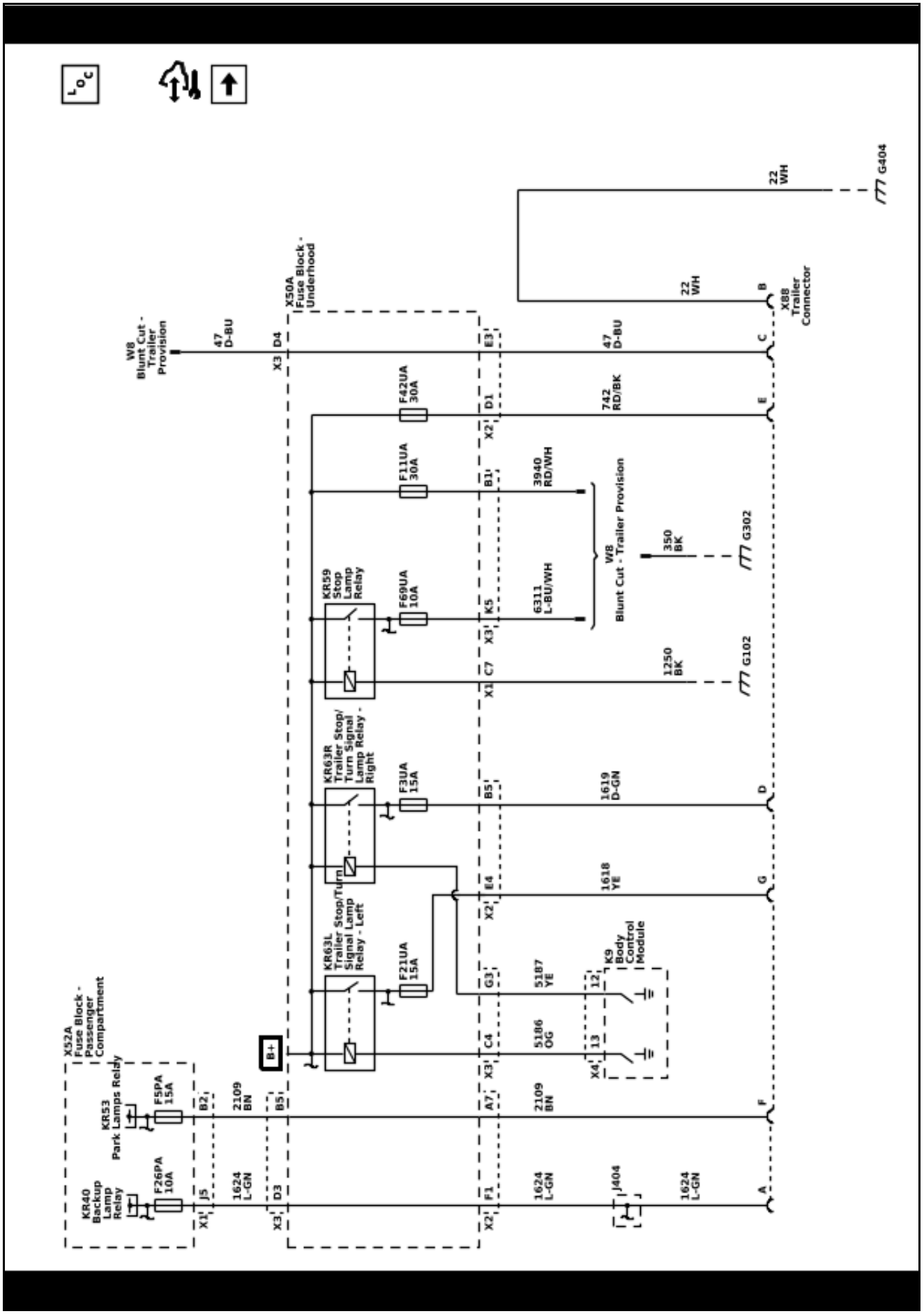
Heated Mirror System Operation

The heated mirror system operates in parallel to the rear window defogger. Each outside rearview mirror contains a heating element that is connected to a constant ground source. When the rear window defogger system is active, battery voltage is available to the outside rearview mirrors through the heated mirror supply voltage circuit. The mirrors will heat up to remove ice, snow or frost and will automatically deactivate when the rear defogger system has timed out, approximately 10 minutes.

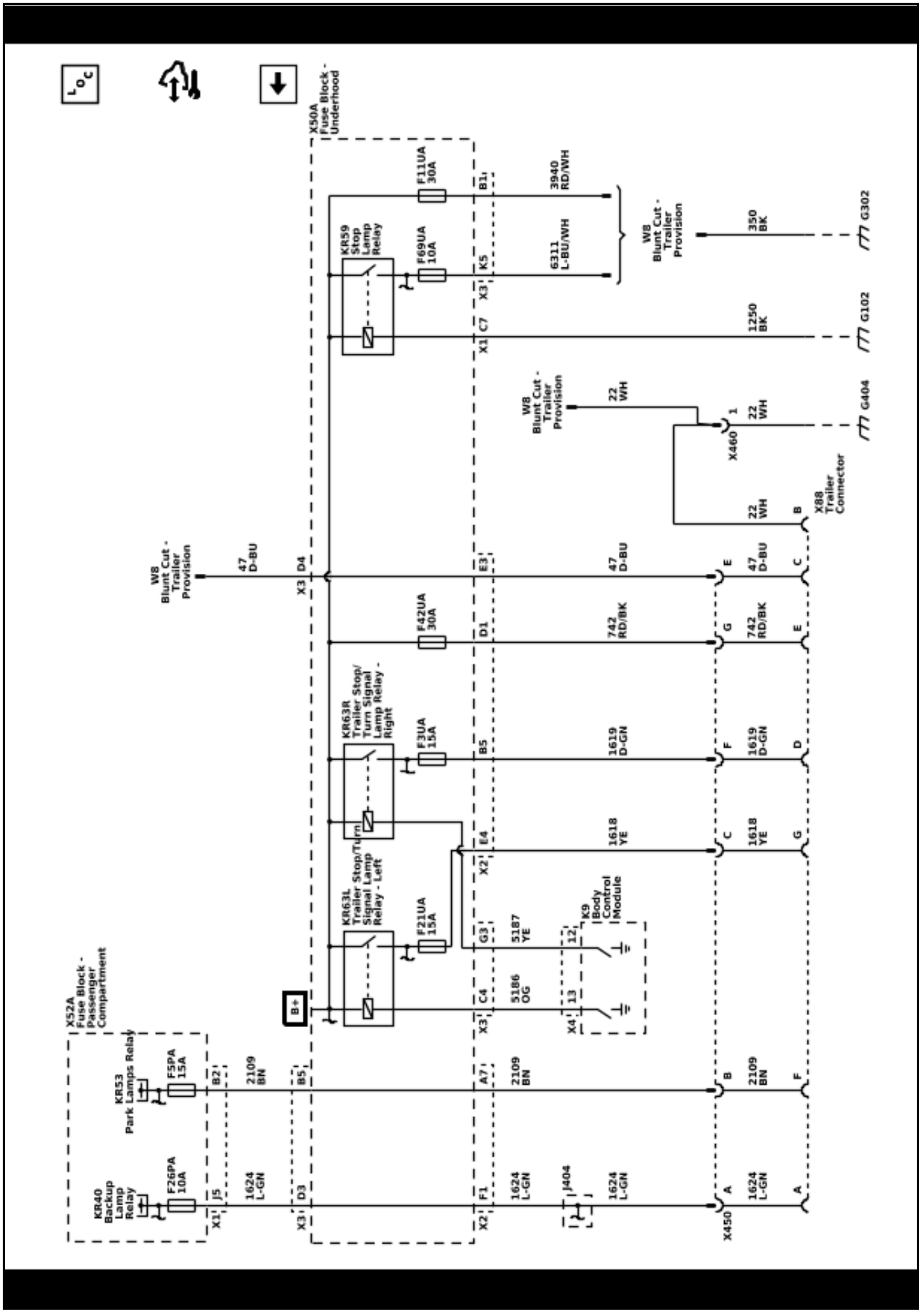
Trailering Systems

Schematic and Routing Diagrams

Trailering Systems Schematics (Trailer Connector/Provision (UY7 without NE7))



Trailering Systems Schematics (Trailer Connector/Provision (UY7 with NE7))



Description and Operation

Trailering Description and Operation

Trailer Lamps

Backup Lamps

With the engine running and the transmission in the reverse position, the transmission control module (TCM) sends a serial data message to the K9 Body Control Module (BCM). The message indicates that the gear selector is in the reverse position. The BCM responds by applying voltage to the KR40 Backup Lamp Relay control circuit. With the backup lamp relay energized, the relay switch contacts close and battery voltage is applied through the backup lamp fuse to the trailer backup lamp control circuit which illuminates the trailer backup lamp(s). Once the driver moves the gear selector out of the reverse position, a message is sent by the TCM via serial data requesting the BCM to remove battery voltage from the backup lamp relay control circuit. The engine must be running for the backup lamps to operate.

Park Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the K9 Body Control Module (BCM). The BCM responds by applying ground to the KR53 Park Lamps Relay control circuit. With the park lamp relay energized, the relay switch contacts close and battery voltage is applied through the park lamp fuse to the trailer park lamp control circuit which illuminates the trailer park lamps.

Stop Lamps

For stop lamp operation, the left and right trailer stop/turn signal lamp relay's are supplied with battery voltage at all times. The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The K9 Body Control Module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM responds by applying ground to the left and right stop lamp relay control circuits. With the left and right trailer stop/turn signal lamp relay's energized, the relay switch contacts close and battery voltage is applied through the left and right trailer stop/turn signal fuse's to the trailer stop lamp control circuits which illuminates the trailer stop lamps.

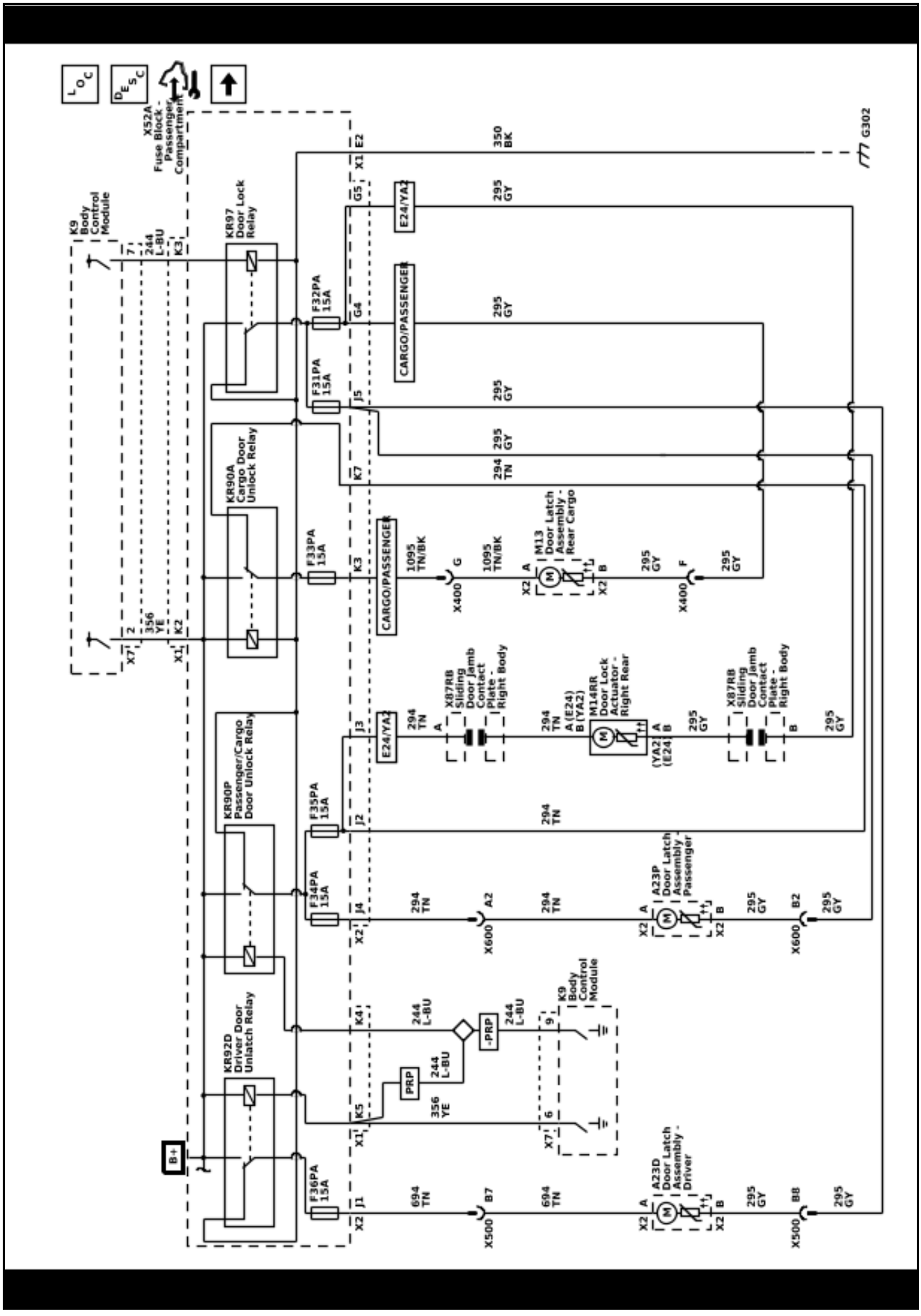
Turn Signal Lamps

For turn signal lamp operation, the left and right trailer stop/turn signal lamp relay's are supplied with battery voltage at all times. Ground is applied at all times to the turn signal/multifunction switch. The turn signal lamps may only be activated with the ignition switch in the ON or START positions. When the turn signal/multifunction switch is placed in either the TURN RIGHT or TURN LEFT position, ground is applied to the K9 Body Control Module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds to the turn signal switch input by applying a pulsating ground to the appropriate left or right trailer stop/turn signal lamp relay control circuits energizing the relay's in an ON and OFF cycle. With the left or right trailer stop/turn signal lamp relay's energized, the relay switch contacts cycle ON and OFF applying battery voltage through the left or right trailer stop/turn signal fuse to the trailer turn signal lamp control circuits which illuminates the trailer turn signal lamps in an ON and OFF cycle.

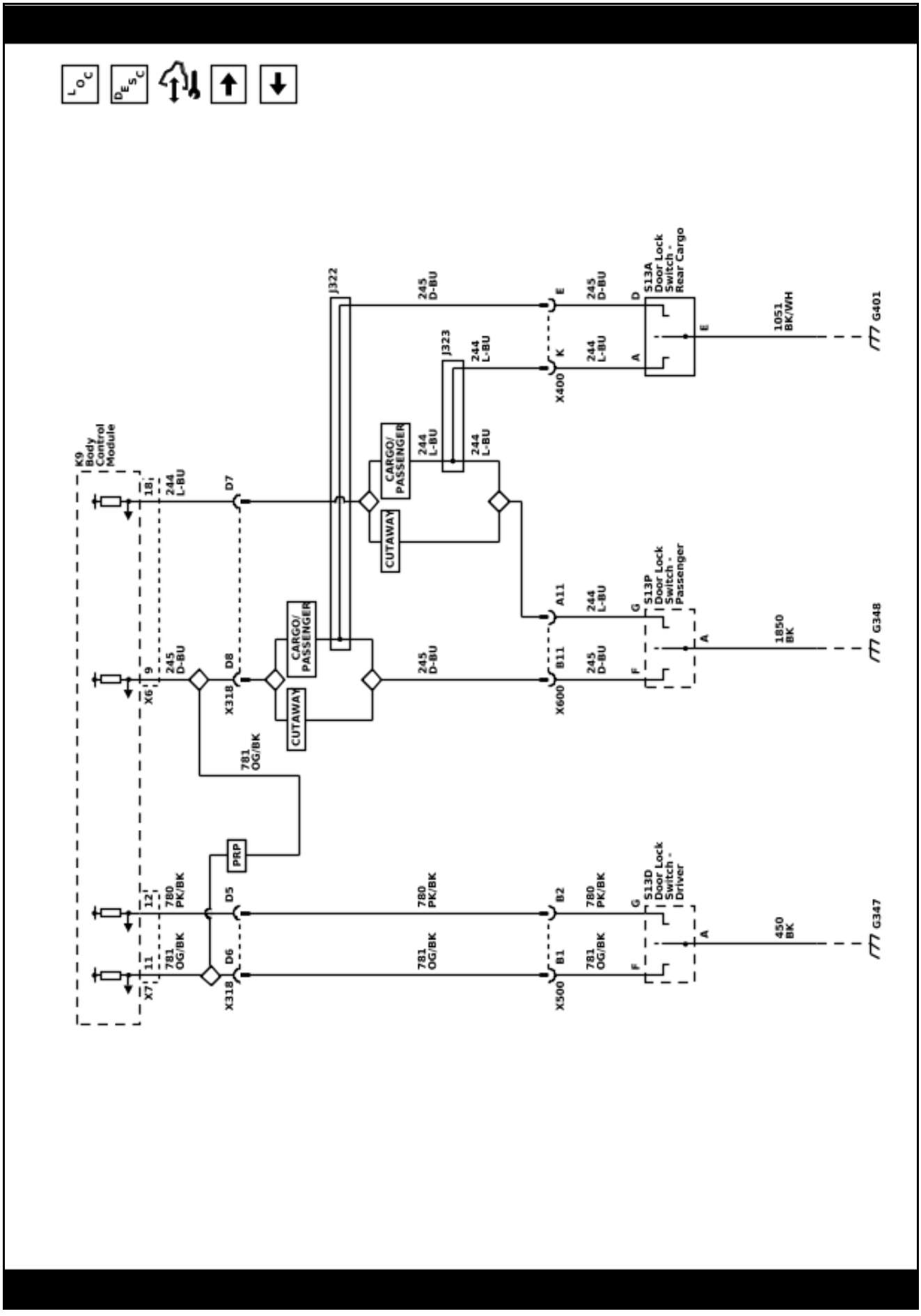
Vehicle Access

Schematic and Routing Diagrams

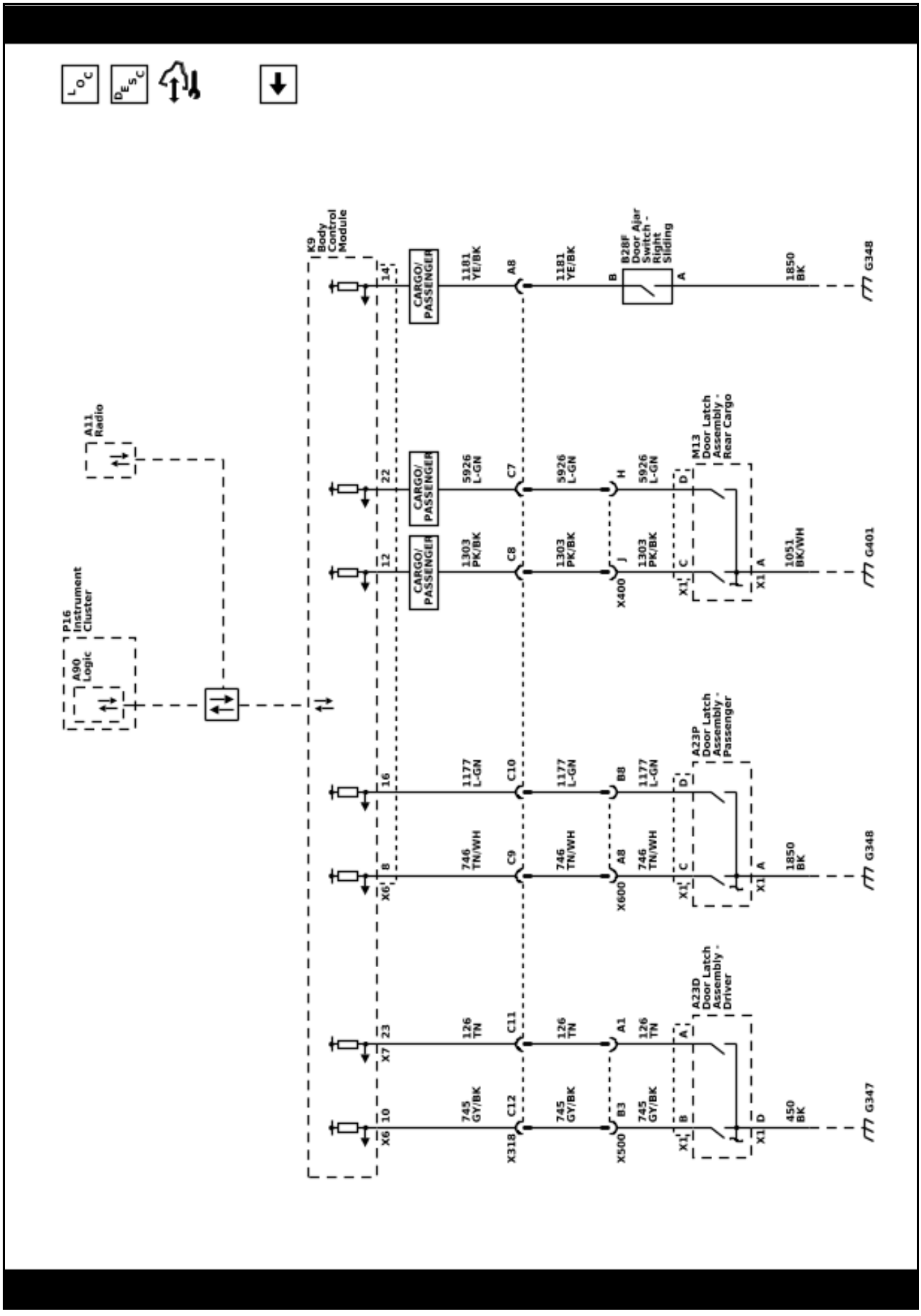
Door Lock/Indicator Schematics (Lock/Unlock Control (AU3))



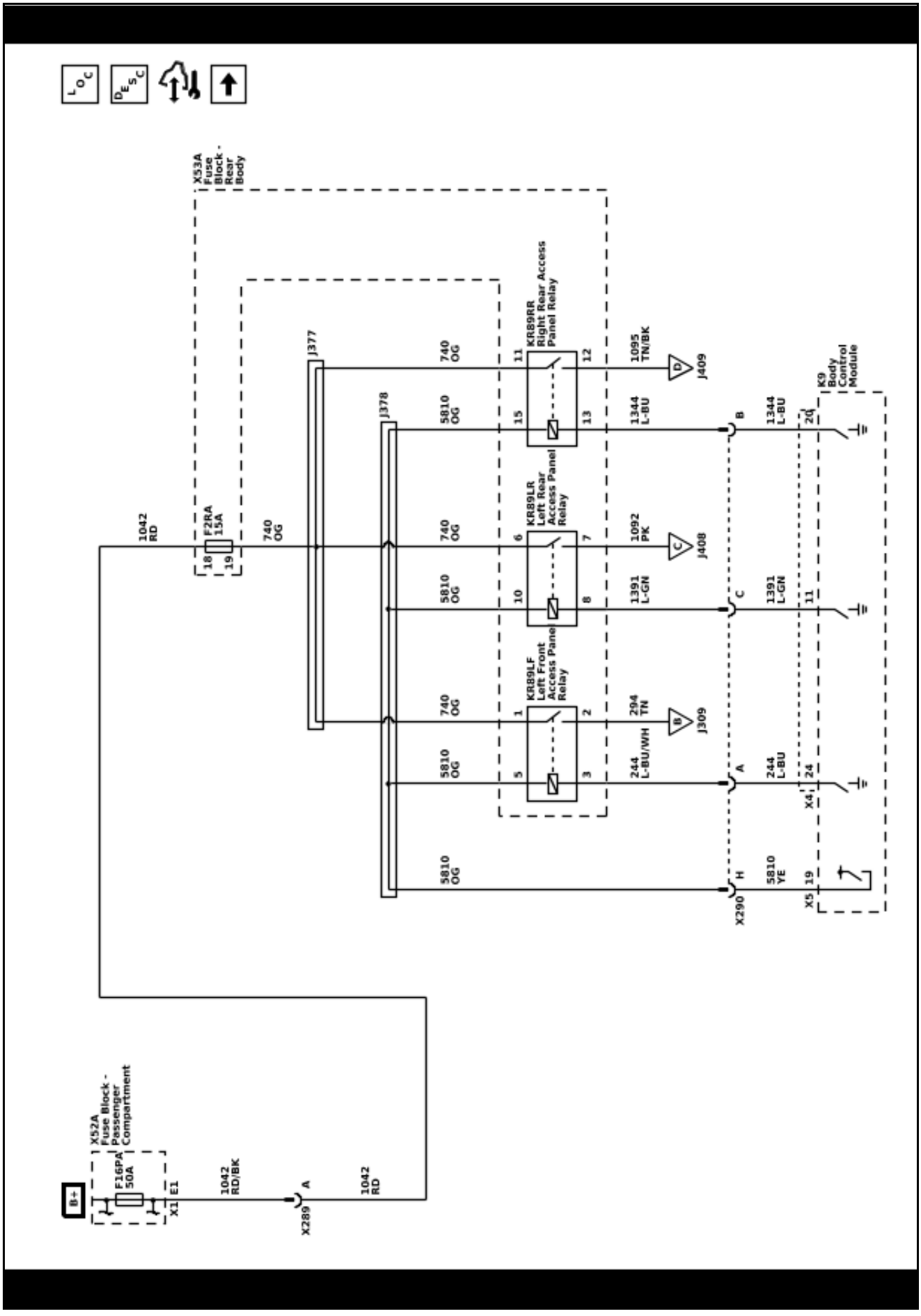
Door Lock/Indicator Schematics (Door Lock Switches (AU3))



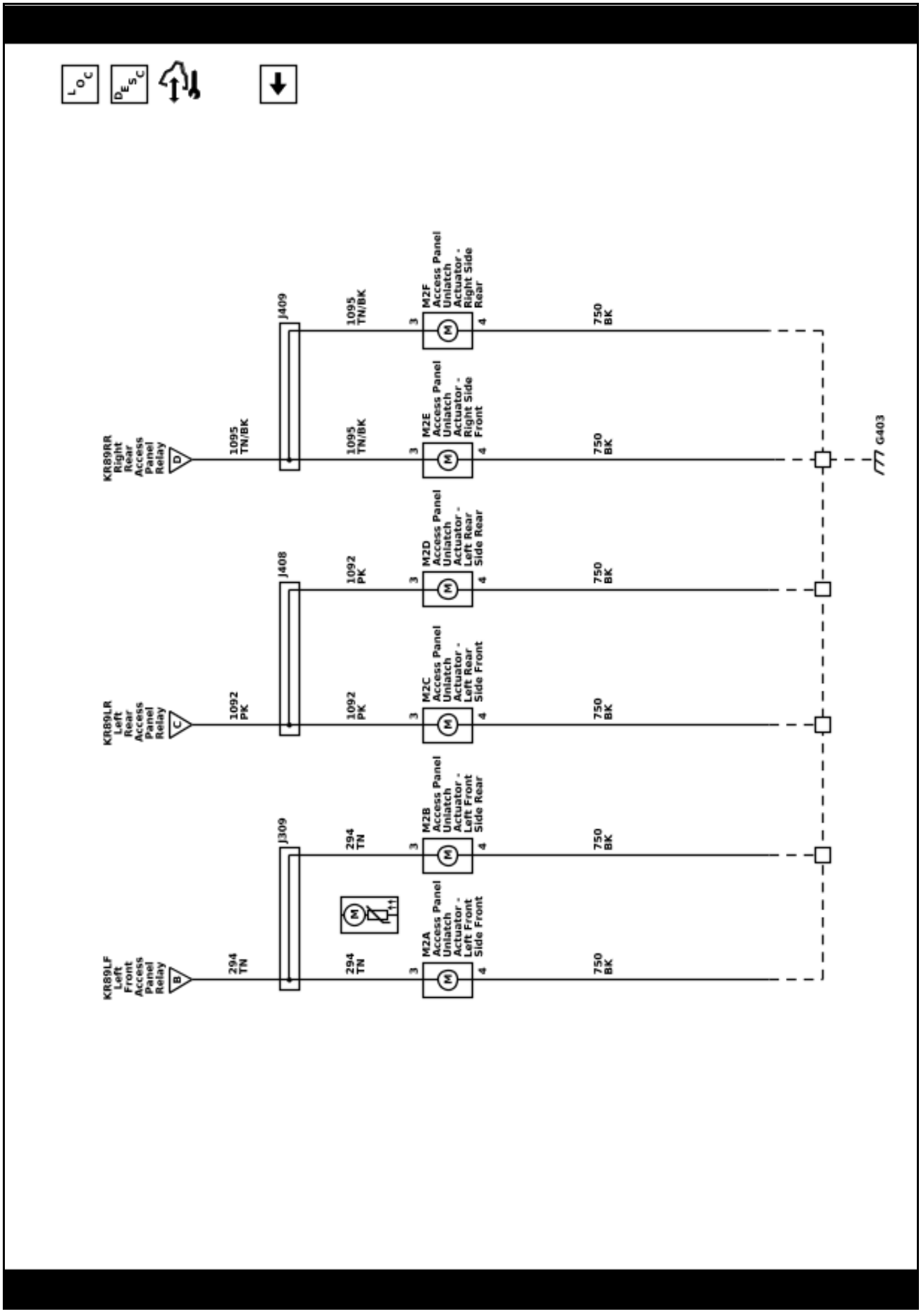
Door Lock/Indicator Schematics (Door Ajar Switches)



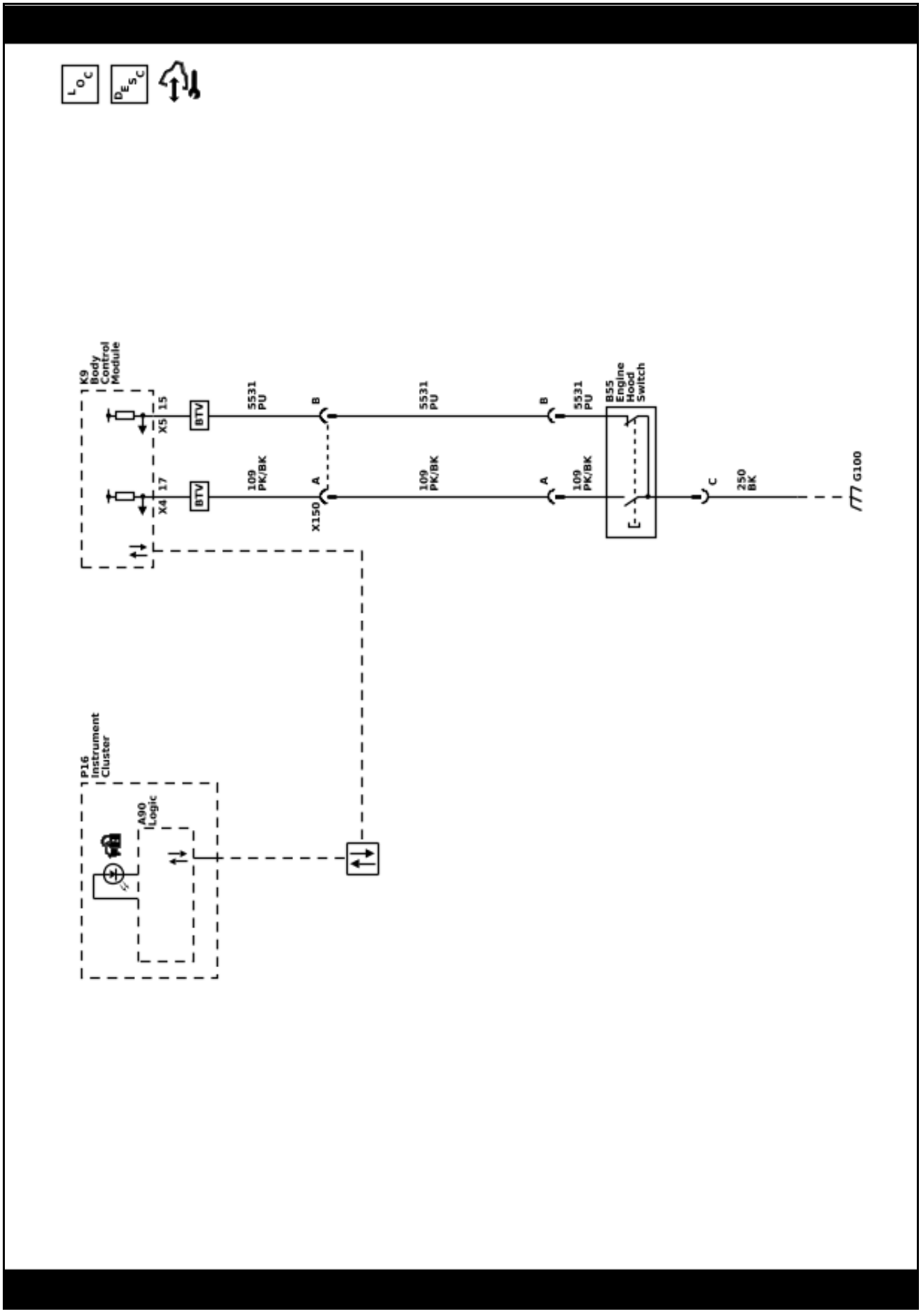
Release Systems Schematics (Side Access Panel Relay Controls (PRP))



Release Systems Schematics (Side Access Panel Actuators (PRP))



Hood Latch Schematics (Hood Latch)



Description and Operation

Access Panel Description and Operation

The access panel entry system is a supplementary vehicle entry device. Radio frequencies or discharged batteries may disable the system.

The access panel entry system allows you to operate the following components:

- The Left Front Access Panel if equipped
- The Left Rear Access Panel
- The Right Rear Access Panel

Pro/Access models use the key fob to activate up to 3 access panels depending on the cargo door option:

- One access panel on the right side of the vehicle.
- One access panel on the left side of vehicles equipped with left side cargo doors.
- Two access panels on the left side of vehicles not equipped with left side cargo doors.

The access panel entry system has the following main components:

- The transmitters
- The remote control door lock receiver (RCDLR).
- The body control module (BCM).

This vehicle is not equipped with remote keyless entry system (RKE). The transmitter is used exclusively to operate the access panels. When you press any button on a programmed k transmitter, the transmitter sends a signal to the RCDLR. The RCDLR sends a class 2 message to the body control module (BCM) which activates the appropriate access panel relay, releasing the panel.

Rolling Code

The access panel entry system uses rolling code technology. Rolling code technology prevents anyone from recording the message sent from the transmitter and using the message in order to gain entry to the vehicle. The term, rolling code, refers to the way that the keyless entry system sends and receives the signals. The transmitter sends the signal in a different order each time. The transmitter and the RCDLR are synchronized to the appropriate order. If a programmed transmitter sends a signal that is not in the order that the RCDLR expects, then the transmitter is out of synchronization. This occurs after 256 presses of any transmitter button when it is out of range of the vehicle.

Door Ajar Indicator Description and Operation

Door Ajar Indicator System Components

The door ajar indicator system consists of the following components:

- The body control module (BCM)
- The instrument panel cluster (IPC)
- The driver information center (DIC)
- The door ajar switch

Door Ajar Operation

The body control module (BCM) receives a discrete input from the door ajar switch to indicate the status of the door. The BCM then communicates this status to the instrument panel cluster (IPC) via GMLAN serial data. The IPC, upon receipt of this message, will illuminate the door ajar message in the driver information center (DIC) and also send a GMLAN serial data message to the radio to activate the door ajar audible warning when the following conditions are met:

- The transmission is shifted out of PARK.
- The vehicle speed is greater than 8 km/h (5 mph).

Hood Ajar Indicator Description and Operation

Hood Ajar Switch

The hood ajar switch provides closure status of the hood to the body control module (BCM) and on vehicles equipped with any hybrid drivetrain or start stop technology a power train module. The switch is integrated into the hood latch assembly. The BCM, and other module if equipped, monitor the voltage on their circuit as it passes through the different positions of the hood switch.

The BCM uses the hood ajar switch as a content theft deterrent alarm trigger.

Hood Ajar Indicator/Message

When the hood is ajar, a message is displayed on the driver information center (DIC) or the hood ajar indicator will be illuminated.

Power Door Locks Description and Operation

Door Lock System Components

The power door lock system consists of the following components:

- Driver door lock switch
- Front passenger door lock switch
- Rear cargo door lock switch
- Door lock relay
- Passenger door unlock relay
- Driver door unlock relay
- Cargo door unlock relay
- Body Control Module (BCM)
- Reversible door lock actuators in each of the doors
- DRV LKS 10A fuse, driver door unlock relay supply voltage
- CARGO UNLK 10A fuse, cargo door unlock relay supply voltage
- DOOR LKS 20A fuse, door lock relay and passenger door unlock relay supply voltage

Door Lock System Controls

The power door lock system can be controlled by any of the following:

- A power door lock or unlock switch activation
- A keyless entry transmission
- A lock out prevention function
- A last door locking function

Driver, Passenger and Cargo Door Lock Operation

When any of the door lock switches are placed in the lock position, a ground signal is applied to the BCM through the door lock signal circuit. Upon receiveing this signal, the BCM grounds the control side of the door lock relay through the door lock relay control circuit. Since the other side of the door lock relay winding is connected to battery voltage, the relay is energized. This causes the contacts to close and complete the path from the DOOR LKS fuse through the battery voltage circuit. Voltage is then applied to the lock side of the door lock actuators through the door lock actuator lock circuits. Since the other side of the all the door lock actuators are connected to the normally closed contacts of their respective unlock relays to ground, the doors lock.

The lock function can also be accomplished by the BCM supplying ground to the door lock relay control circuit by either of the following:

- A keyless entry lock transmission
- A last door lock function

Driver Door Unlock Operation

When any of the door lock switches are placed in the unlock position, a ground signal is applied to the BCM through the door unlock signal circuit. Upon receiveing this signal, the BCM grounds the control side of the driver door unlock relay through the driver door unlock relay control circuit. Since the other side of the driver door unlock relay winding is connected to battery voltage, the relay is energized. This causes the contacts to close and complete the path from the DRV LKS fuse through the battery voltage circuit. Voltage is then applied to the unlock side of the driver door lock actuator through the driver door lock actuator unlock control circuit. Since the other side of the the driver door lock actuator is connected to the normally closed contacts of the door lock relay to ground, the driver door unlocks.

The driver door unlock function can also be accomplished by the BCM supplying ground to the driver door unlock relay control circuit by either of the following:

- A keyless entry unlock transmission
- A lock out prevention function

Passenger Door Unlock Operation

When any of the door lock switches are placed in the unlock position, a ground signal is applied to the BCM through the door unlock signal circuit. Upon receiveing this signal, the BCM grounds the control side of the passenger door unlock relay through the door unlock relay control circuit. Since the other side of the door unlock relay winding is connected to battery voltage, the relay is energized. This causes the contacts to close and complete the path from the DOOR LKS fuse through the battery voltage circuit. Voltage is then applied to the unlock side of the passenger door lock actuators through the door lock actuator unlock control circuits. Since the other side of the the door lock actuators are connected to the normally closed contacts of the door lock relay to ground, the passenger doors unlock.

The door unlock function can also be accomplished by the BCM supplying ground to the passenger door unlock relay control circuit during a keyless entry unlock transmission.

Cargo Door Unlock Operation

When any of the door lock switches are placed in the unlock position, a ground signal is applied to the BCM through the door unlock signal circuit. Upon receiveing this signal, the BCM grounds the control side of the cargo door unlock relay through the cargo door unlock relay control circuit. Since the other side of the cargo door unlock relay winding is connected to battery voltage, the relay is energized. This causes the contacts to close and complete the path from the CARGO UNLK fuse through the battery voltage circuit. Voltage is then applied to the unlock side of the cargo door lock actuator through the door lock actuator unlock control circuit. Since the other side of the the cargo door lock actuator is connected to the normally closed contacts of the door lock relay to ground, the cargo door unlocks.

The cargo door unlock function can also be accomplished by the BCM supplying ground to the cargo door unlock relay control circuit during a keyless entry unlock transmission.

Delay Locking Operation

This feature allows the operator to lock all the doors from a door lock switch with the side doors(s) open. The side cargo doors have contact plates that complete the power door lock and unlock control circuits, among others, when the side cargo doors are closed, and interrupt these circuits when the doors are open. When a lock function occurs and the BCM senses an active state on any door ajar switch signal circuit the driver, front passenger and cargo doors will lock as described. The BCM continues to monitor door ajar switch signal circuits. When the BCM senses an inactive state, door closed, the BCM will cycle the door lock relay again after approximately 5 seconds to perform another lock function, thus locking the side cargo door(s).

Lockout Prevention

This feature prevents the locking of the driver door if the ignition key is left in the ignition lock cylinder. If a lock function occurs from any door lock switch and the BCM senses a door ajar and the key in ignition switch signal circuit is in the yes state, the BCM will cycle the door lock relay to lock the doors and then cycle the driver door unlock relay to unlock the driver door.

Section 3

Driver Information and Entertainment

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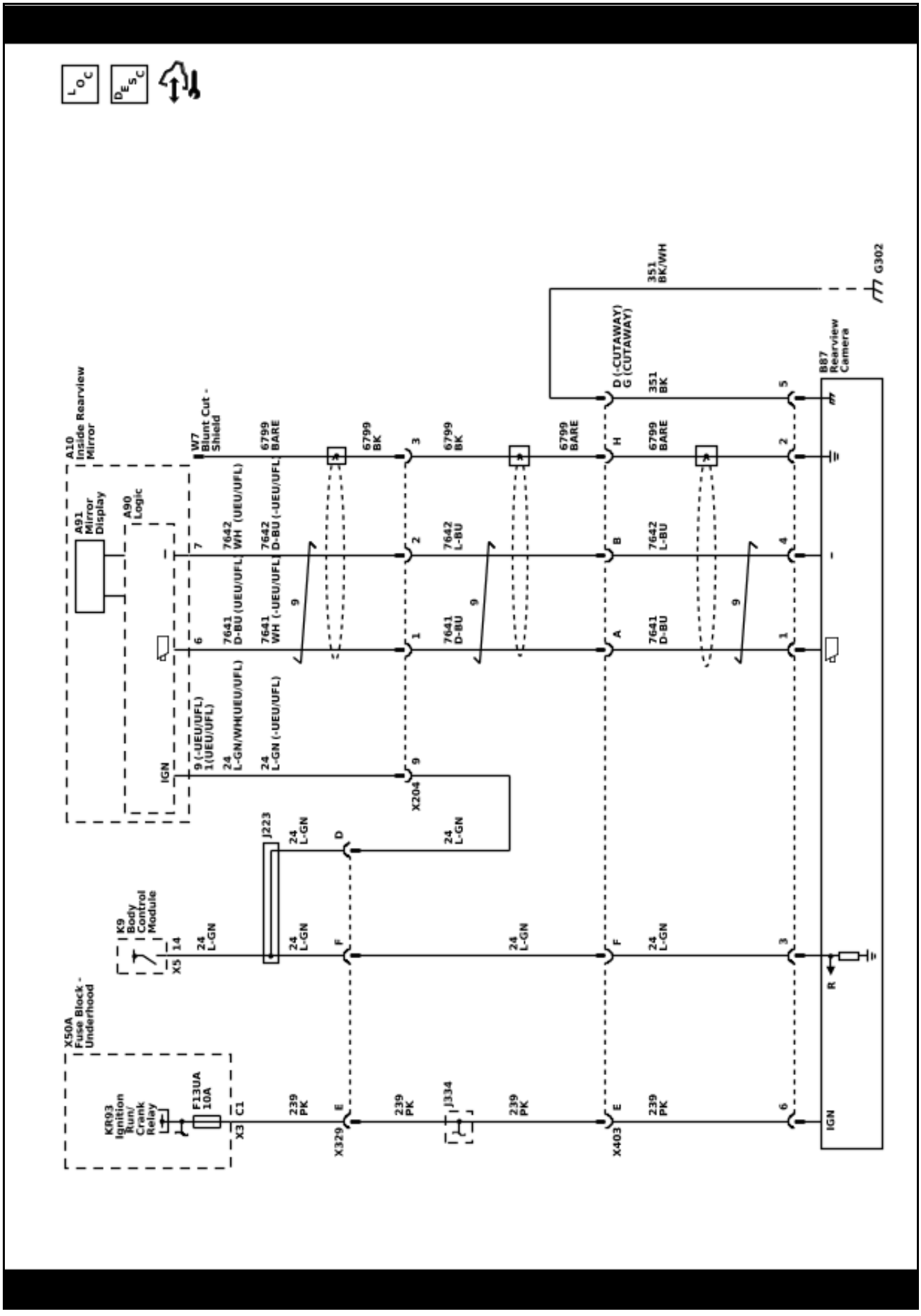
Image Display Cameras

Schematic and Routing Diagrams

Image Display Camera Schematics (Rear Vision Camera (UVC))



Description and Operation

Rear Vision Camera Description and Operation

The rear vision camera system consists of the rearview camera and the infotainment system.

When the transmission is placed into R, 12 V is applied to the reverse lamp control circuit by the body control module (BCM). The rearview camera monitors this circuit and when 12 V is seen, indicating that the transmission is in R, the rearview camera will activate. The rearview camera receives ignition voltage and a constant ground to power the camera. Video signal + and video signal – circuits carry the video image from the rearview camera to the infotainment system. Additionally, the video signal circuits are shielded to prevent any interference which may lead to a loss of video signal resolution and cause a degraded video image. The shield is grounded by the rearview camera.

The following conditions may cause a degraded rear vision camera image:

- Ice, snow, or mud has built up on the rear vision camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Damage to the rear of the vehicle
- Extreme high temperatures or extreme temperature changes

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Section 4

Engine/Propulsion

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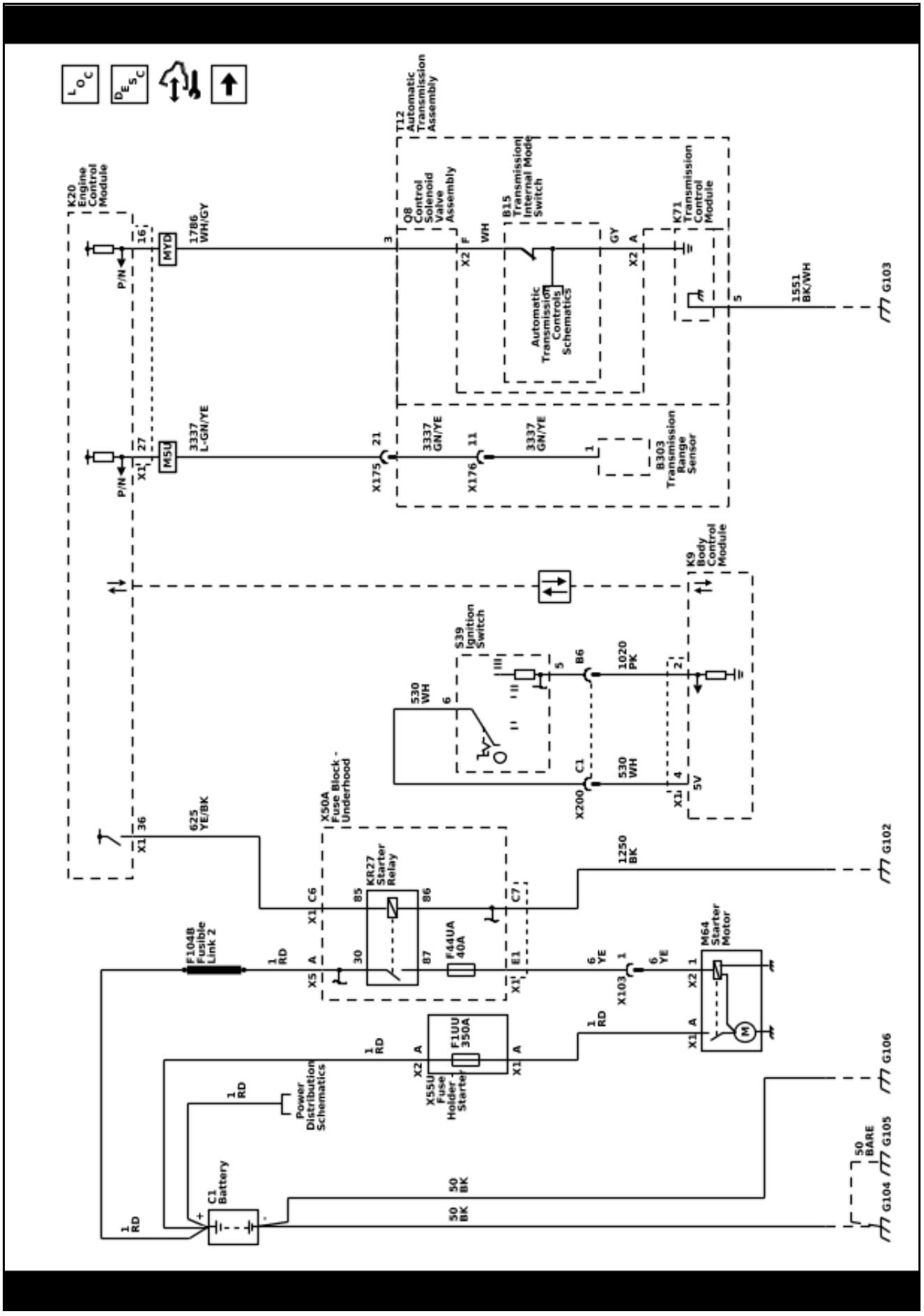
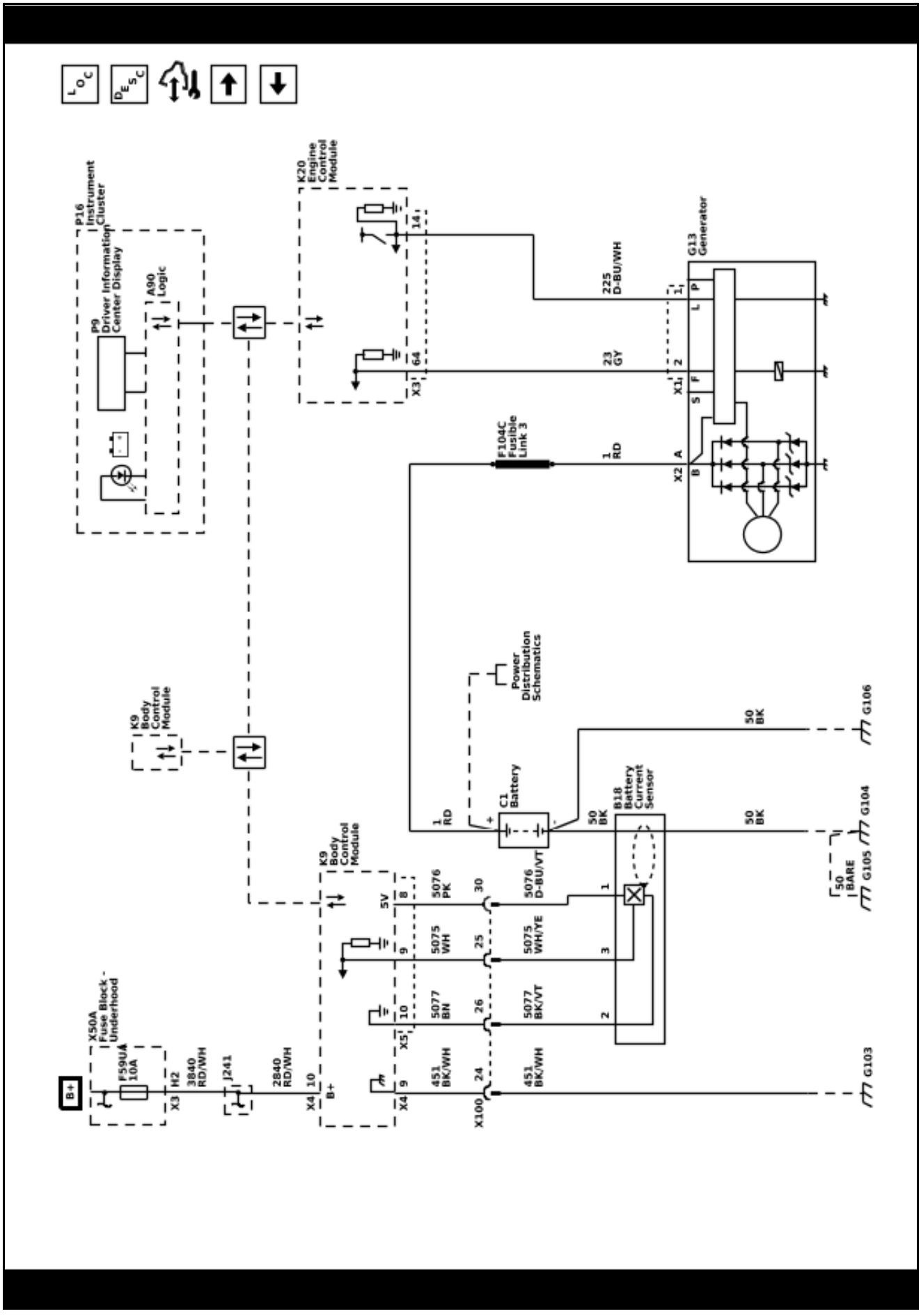
12 V Starting and Charging

Schematic and Routing Diagrams

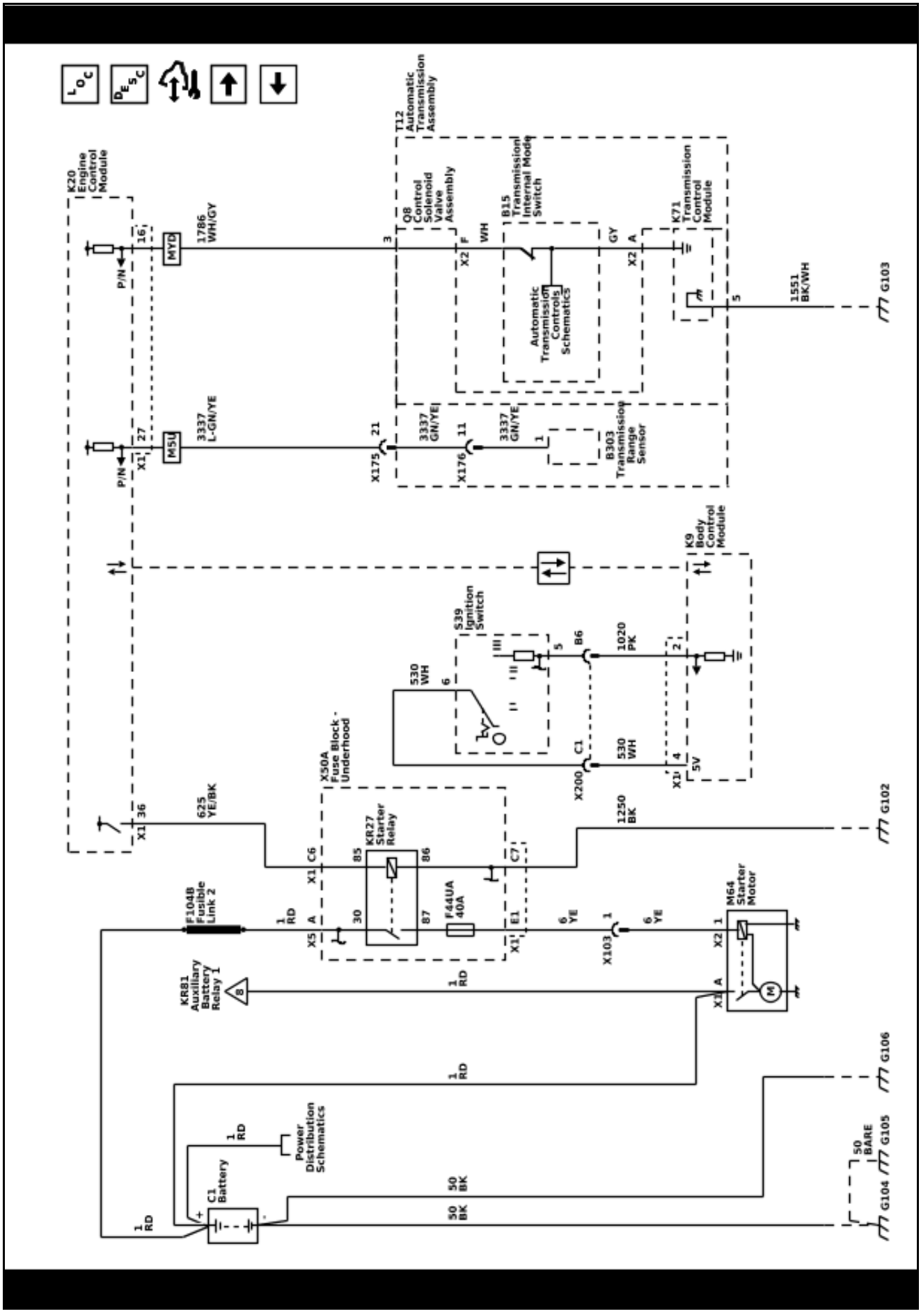
Starting and Charging Schematics (Starting System (One Battery))



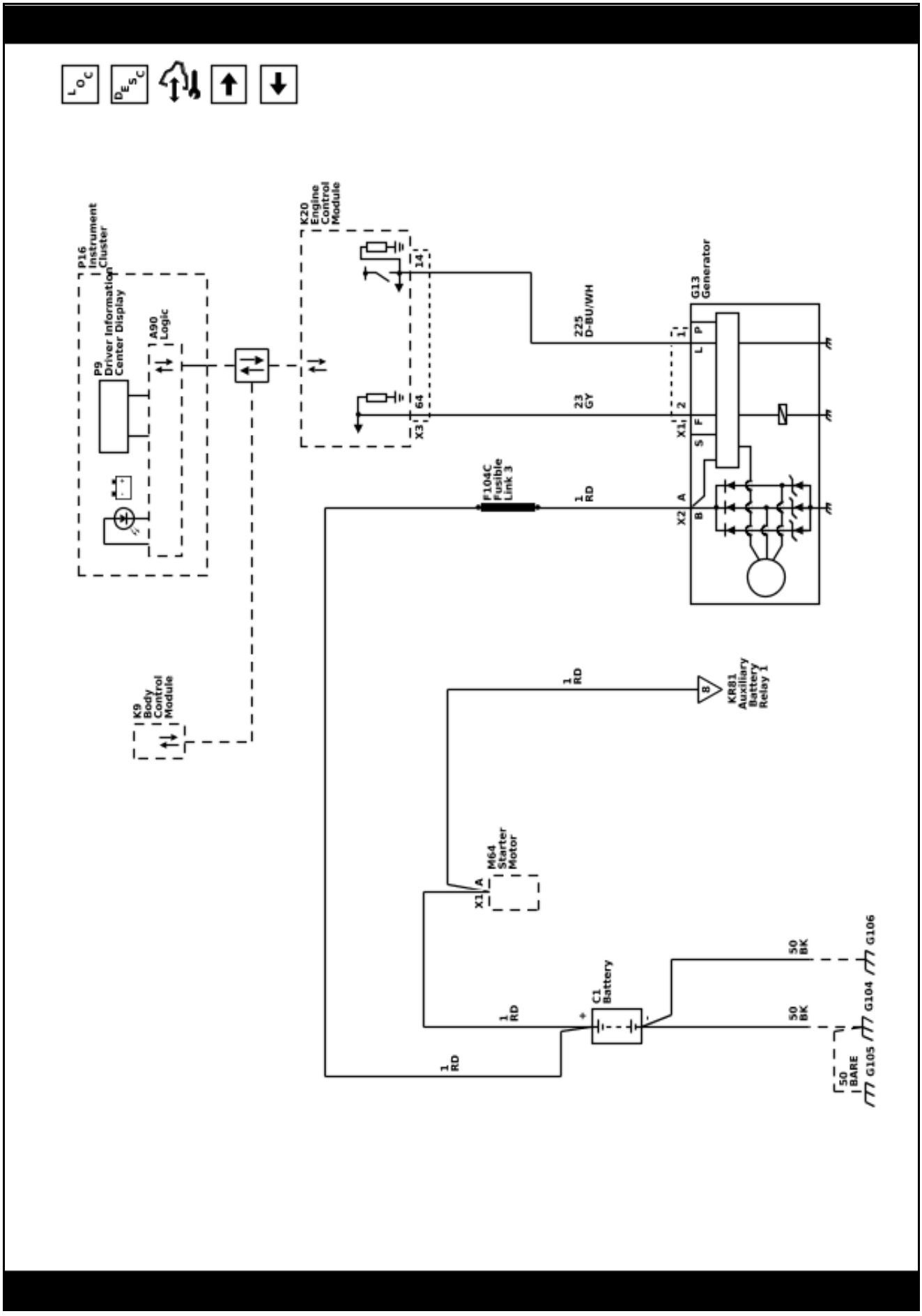
Starting and Charging Schematics (Charging System (One Battery))



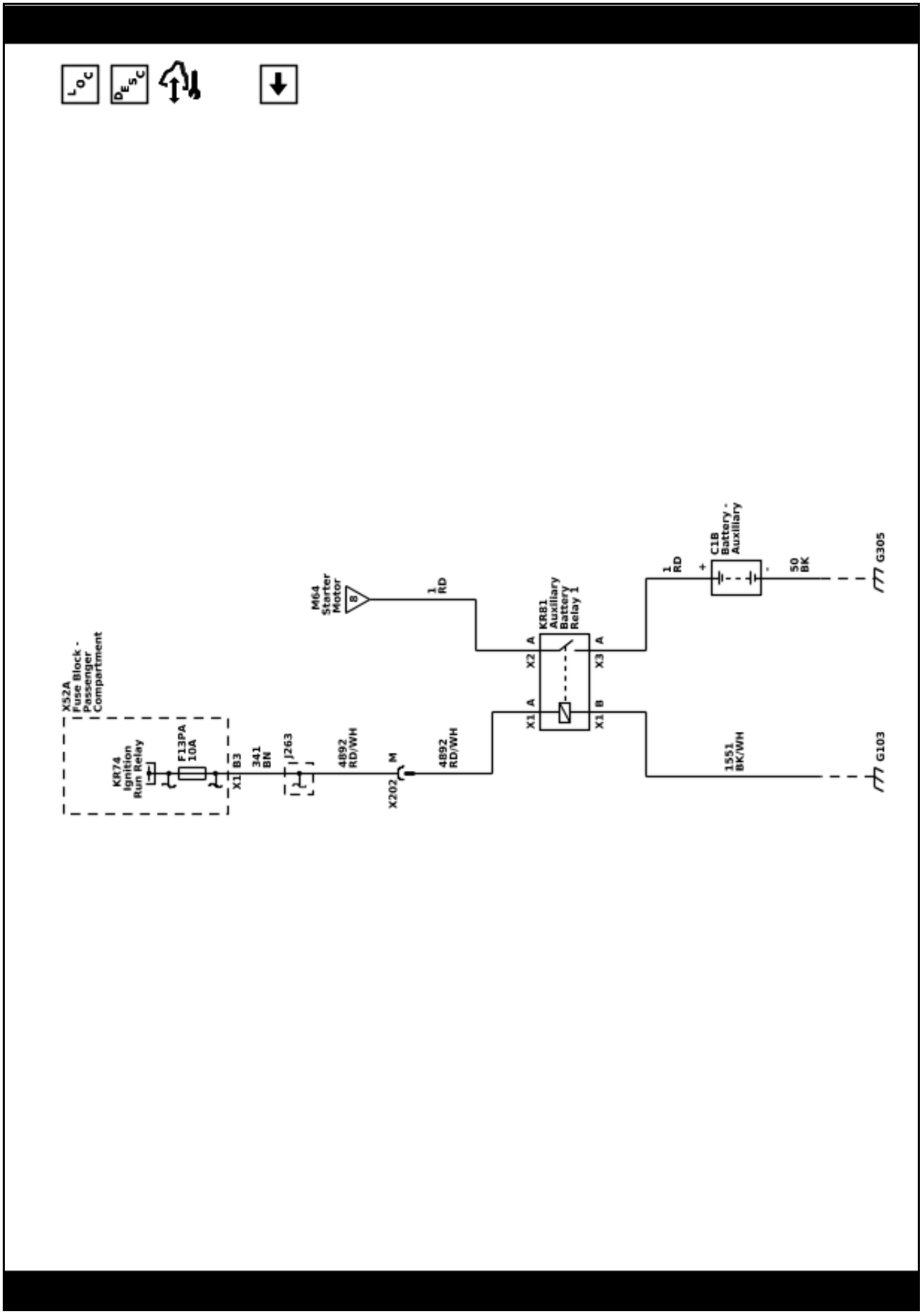
Starting and Charging Schematics (Starting System (Two Batteries))



Starting and Charging Schematics (Charging System (Two Batteries))



Starting and Charging Schematics (Auxiliary Battery Relay and Auxiliary Battery (Two Batteries))



Description and Operation

Battery Description and Operation

Warning: Batteries produce explosive gases, contain corrosive acid, and supply levels of electrical current high enough to cause burns. Therefore, to reduce the risk of personal injury when working near a battery:

- ***Always shield your eyes and avoid leaning over the battery whenever possible.***
- ***Do not expose the battery to open flames or sparks.***
- ***Do not allow the battery electrolyte to contact the eyes or the skin. Flush immediately and thoroughly any contacted areas with water and get medical help.***
- ***Follow each step of the jump starting procedure in order.***
- ***Treat both the booster and the discharged batteries carefully when using the jumper cables.***

Batteries that are no longer wanted must be disposed of by an approved battery recycler and must never be thrown in the trash or sent to a landfill.

Batteries that are not part of the vehicle itself, not the battery under the hood, must only be transported on public streets for business purposes via approved hazardous material transportation procedures.

Battery storage, charging and testing facilities in repair shops must meet various requirements for ventilation, safety equipment, material segregation, etc.

The maintenance free battery is standard. There are no vent plugs in the cover. The battery is completely sealed except for 2 small vent holes in the side. These vent holes allow the small amount of gas that is produced in the battery to escape.

The battery has 3 functions as a major source of energy:

- Engine cranking
- Voltage stabilizer
- Alternate source of energy with generator overload

Battery Low Start Vehicle Message

The body control module (BCM) monitors battery positive voltage to determine battery state of charge. If one or more of the BCM battery positive voltage terminals measure less than approximately 11.6V compared to the BCM ground circuits, this message will display and four chimes may sound. Start the vehicle immediately. If the vehicle is not started and the battery continues to discharge, the climate controls, heated seats, and audio systems will shut off and the vehicle may require a jump start. These systems will function again after the vehicle is started.

Battery Ratings

A battery has 2 ratings:

- Cold cranking amperage
- Amperage hours

When a battery is replaced use a battery with similar ratings. See battery specification label on the original battery.

Amperage Hours

The amperage hour rating tells you how much amperage is available when discharged evenly over a 20 hour period. The amperage hour rating is cumulative, so in order to know how many constant amperage the battery will output for 20 h, you have to divide the amperage hour rating by 20. Example: If a battery has an amperage hour rating of 74, dividing by 20 = 3.75. Such a battery can carry a 3.75 A load for 20 hours before dropping to 10.5 V. (10.5 V is the fully discharged level, at which point the battery needs to be recharged.) A battery with an amperage hour rating of 55 will carry a 2.75 A load for 20 hours before dropping to 10.5 V.

Cold Cranking Amperage

The cold cranking amperage is an indication of the ability of the battery to crank the engine at cold temperatures. The cold cranking amperage rating is the minimum amperage the battery must maintain for 30 seconds at −18°C (0°F) while maintaining at least 7.2 V. See battery label for the cold cranking amperage rating of this battery.

Charging System Description and Operation

Electrical Power Management Overview

The electrical power management system is designed to monitor and control the charging system and send diagnostic messages to alert the driver of possible problems with the battery and generator. This electrical power management system primarily utilizes existing on-board computer capability to maximize the effectiveness of the generator, to manage the load, improve battery state-of-charge and life, and minimize the system's impact on fuel economy. The electrical power management system performs 3 functions:

- Monitor the battery voltage and estimate the battery condition
- Take corrective actions by boosting idle speeds, and adjusting the regulated voltage
- Perform diagnostics and driver notification

The battery condition is estimated during ignition/vehicle off and during ignition/vehicle on. During ignition/vehicle off the state-of-charge of the battery is determined by measuring the open-circuit voltage. The state-of-charge is a function of the acid concentration and the internal resistance of the battery, and is estimated by reading the battery open circuit voltage when the battery has been at rest for several hours.

Any time the ignition/vehicle is on, the vehicle algorithm continuously estimates battery state-of-charge based on adjusted net amp hours, battery capacity, initial state-of-charge, and calculated temperature.

While the engine is running, the battery degree of discharge is primarily determined by the integrated battery current sensor, to obtain net amp hours.

In addition, the electrical power management function is designed to perform regulated voltage control to improve battery state-of-charge, battery life, and fuel economy. This is accomplished by using knowledge of the battery state-of-charge and temperature to set the charging voltage to an optimum battery voltage level for recharging without detriment to battery life.

Charging System Components

Generator

The engine drive belt drives the generator. When the rotor is spun, it induces an alternating current (AC) into the stator windings. The AC voltage is then sent through a series of diodes for rectification. The rectified voltage has been converted into a direct current (DC) for use by the vehicles electrical system to maintain electrical loads and the battery charge. The voltage regulator integral to the generator controls the output of the generator; It is not serviceable. The voltage regulator controls the amount of current provided to the rotor. If the generator has field control circuit fault, the generator defaults to an output voltage of 13.8 V.

The generator is serviced as a complete assembly. If there is a diagnosed fault in the generator, it must be replaced as an assembly.

Generator Pulley

The pulley drives the Generator via the engine drive belt. There are 2 types of pulleys:

1. Conventional solid Pulley which is bolted to the Generator stator shaft. This Pulley can be serviced separately.

2. One Way Clutch Pulley or Overrunning Alternator Decoupler Pulley allows the Generator to spin freely when the engine rapidly slows down on sudden deceleration. This part is not serviceable and the Generator needs to be replaced as an assembly.

Body Control Module (BCM)

The BCM communicates with the Engine Control Module (ECM) and the instrument cluster for electrical power management operation. The BCM determines the output of the generator and sends the information to the ECM for control of the generator turn on signal circuit. It monitors the generator field duty cycle signal circuit information sent from the ECM for control of the generator. It monitors the battery current sensor, the battery positive voltage circuit, and estimates battery temperature to determine battery state of charge. The BCM also performs idle boost.

Battery Current Sensor (if applicable)

The Battery Current Sensor is a serviceable component that is connected to the negative battery cable at the battery. The battery current sensor is a 3-wire hall effect current sensor. The battery current sensor monitors the battery current. It directly inputs to the BCM. It creates a 5 volt Pulse Width Modulation (PWM) signal of 128 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–95%. Between 0–5% and 95–100% are for diagnostic purposes.

Battery Sensor Module (if applicable)

The BCM monitors the Battery Sensor Module for battery state of current, state of health, and battery charge via serial data. If the battery is determined to be in poor state of health or having a low state of charge, the BCM will not allow the ECM to perform an auto-stop.

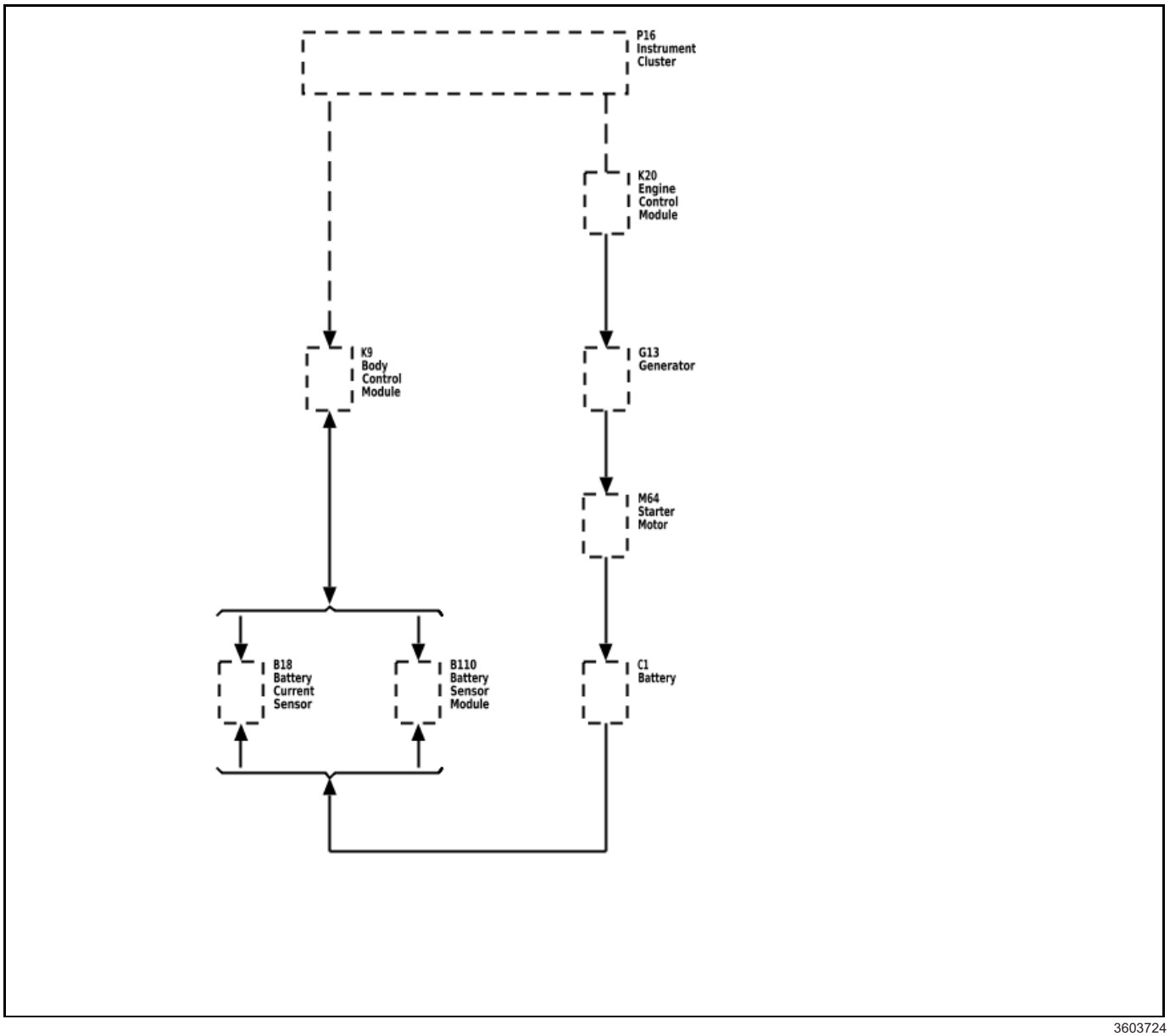
Engine Control Module (ECM)

When the engine is running, the generator turn-on signal is sent to the generator from the ECM, turning on the regulator. The generator's voltage regulator controls current to the rotor, thereby controlling the output voltage. The rotor current is proportional to the electrical pulse width supplied by the regulator. When the engine is started, the regulator senses generator rotation by detecting AC voltage at the stator through an internal wire. Once the engine is running, the regulator varies the field current by controlling the pulse width. This regulates the generator output voltage for proper battery charging and electrical system operation. The generator field duty terminal is connected internally to the voltage regulator and externally to the ECM. When the voltage regulator detects a charging system problem, it grounds this circuit to signal the ECM that a problem exists. The ECM monitors the generator field duty cycle signal circuit, and receives control decisions based on information from the BCM.

Instrument Cluster

As a means of displaying the charging system functions, some vehicles may be equipped with a voltmeter gauge on the instrument cluster and/or a system voltage display in the driver information center. These will indicate the current vehicle system voltage.

The instrument cluster also provides customer notification if there is a concern with the charging system. There are two means of notification: a charge indicator on the instrument cluster and/or a service system message displayed on the Driver Information Center (DIC) if equipped.



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Charging System Operation

The purpose of the charging system is to maintain the battery charge and vehicle loads. There are 6 modes of operation and they include:

- Battery Sulfation Mode
- Charge Mode
- Fuel Economy Mode
- Head lamp Mode
- Start Up Mode
- Voltage Reduction Mode

The ECM Controls the Generator through the generator turn–on signal circuit, also known as the Generator L-terminal. The ECM monitors the generator performance though the Generator field duty cycle signal circuit, also known as the generator F-terminal.

The Generator turn–on signal (Generator L-terminal) is a Pulse Width Modulation (PWM) signal of 128 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–95%. 0–5% and 95–100% are for diagnostic purposes, with 0–5% monitoring for an open circuit and 95–100% monitoring for a short to ground at a fixed 13.8 V. The following table shows the commanded duty cycle and output voltage of the Generator:

Commanded Duty Cycle	Generator Output Voltage (+/- .25 V)
0–5%	13.8 V
10%	11 V
20%	11.56 V
30%	12.13 V
40%	12.69 V
50%	13.25 V
60%	13.81 V
70%	14.38 V
80%	14.94 V
90%	15.5 V
95–100%	13.8 V

The Generator provides a PWM feedback signal of the Generator voltage output through the Generator field duty cycle signal circuit to the ECM. This information is sent to the Body Control Module (BCM). The Generator field duty cycle signal (Generator F-terminal) is a PWM signal of 60–460 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–100%. 0–5% is reserved for diagnostic purposes.

As the charging systems works to maintain the battery charge and manage vehicle electrical loads, it is normal for the voltmeter gauge on the instrument cluster or the system voltage displayed in the DIC to fluctuate or change. This does not indicate a malfunction. Depending on the battery state of charge and the vehicle electrical load, these values may be anywhere from 12.5 V to 15.5 V.

Charging System Modes

Battery Sulfation Mode

The BCM will enter this mode when the interpreted Generator output voltage is less than 13.2 V for 45 minutes. When this condition exists the BCM will enter Charge Mode for 2–3 minutes. The BCM will then determine which mode to enter depending on voltage requirements.

Charge Mode

The BCM will enter Charge Mode when ever one of the following conditions are met:

- Windshield wipers are ON for more than 3 s.
- Climate Control Voltage Boost Mode Request is true, as sensed by the HVAC control module via serial data. High speed cooling fan, rear defogger, and HVAC high speed blower operation can cause the BCM to enter the Charge Mode.
- The estimated battery temperature is less than 0° C (32°F).
- Battery State of Charge is less than 80%.
- Vehicle speed is greater than 145 km/h (90 mph)
- A current sensor malfunction exists.
- System voltage is determined to be below 12.56 V

When any one of these conditions is met, the system will set targeted generator output voltage to a charging voltage between 13.9–15.5 V, depending on the battery state of charge and estimated battery temperature.

Fuel Economy Mode

The BCM will enter Fuel Economy Mode when the estimated battery temperature is at least 0°C (32°F) but less than or equal to 80°C (176°F), the calculated battery current is less than 15 A and greater than −8 A, and the battery state-of-charge is greater than or equal to 80%. Its targeted generator output voltage is the open circuit voltage of the battery and can be between 12.5–13.1 V. When fuel economy mode is active, the generator is not charging, only maintaining open circuit battery voltage. The BCM will exit this mode and enter Charge Mode when any of the conditions described above are present.

Headlamp Mode

The BCM will enter Headlamp Mode when ever the head lamps are ON (high or low beams). Voltage will be regulated between 13.9–14.5 V.

Start Up Mode

When the engine is started the BCM sets a targeted generator output voltage of 14.5 V for 30 s.

Tow/Haul Mode (if applicable)

Pressing the Tow/Haul Mode button located on the center stack, the vehicle system voltage is raised and the remote (non-vehicle) battery will be charged. Having the headlamps on will raise the system voltage and if the Tow/Haul button is applied it will not serve any purpose. The voltage is regulated between 13.9-14.5 V.

Instrument Cluster Operation

Charge Indicator Operation

The instrument cluster illuminates the charge indicator and displays a warning message in the driver information center if equipped, when the one or more of the following occurs:

- The ECM detects that the generator output is less than 11 V or greater than 16 V. The instrument cluster receives a serial data message from the ECM requesting illumination.
- The instrument cluster determines that the system voltage is less than 11 V or greater than 16 V for more than 30 s. The instrument cluster receives a serial data message from the BCM indicating there is a system voltage range concern.
- The instrument cluster performs the displays test at the start of each ignition cycle. The indicator illuminates for approximately 3 s.

Driver Information Center Message: BATTERY NOT CHARGING SERVICE CHARGING SYSTEM or SERVICE BATTERY CHARGING SYSTEM

The BCM and the ECM will send a serial data message to the driver information center for the BATTERY NOT CHARGING SERVICE CHARGING SYSTEM or SERVICE BATTERY CHARGING SYSTEM message to be displayed. It is displayed when a charging system DTC is a current DTC. The message is turned off when the conditions for clearing the DTC have been met.

Voltmeter Gauge and/or System Voltage Display (if equipped)

As a means of displaying the charging system functions, some vehicles may be equipped with a voltmeter gauge on the instrument cluster and/or a system voltage display in the driver information center. These will indicate the current vehicle system voltage.

As the charging systems works to maintain the battery charge and manage vehicle electrical loads, it is normal for the voltmeter gauge on the instrument cluster or the system voltage display in the driver information center to fluctuate or change. This does not indicate a malfunction. Depending on the battery state of charge and the vehicle electrical load, these values may be anywhere from 12.5 V to 15.5 V.

Electrical Power Management Description and Operation (Gasoline)

The electrical power management is used to monitor and control the charging system and alert the driver of possible problems within the charging system. The electrical power management system makes the most efficient use of the generator output, improves the battery state-of-charge, extends battery life, and manages system electrical loads.

The load shed operation is a means of reducing electrical loads during a low voltage or low battery state-of-charge condition.

The idle boost operation is a means of improving generator performance during a low voltage or low battery state-of-charge condition.

Each electrical power management function, either idle boost or load shed, is discrete. No two functions are active at the same time. Idle boost is activated in incremental steps, idle boost 1 must be active before idle boost 2 can be active. The criteria used by the body control module (BCM) to regulate electrical power management are outlined below:

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Idle Boost 1 Start	Less Than −15°C (5°F)	Less Than 13 V	—	First level Idle boost requested
Idle Boost 1 Start	—	—	Battery has a net loss greater than 0.6 AH	First level Idle boost requested
Idle Boost 1 Start	—	Less Than 10.9 V	—	First level Idle boost requested
Idle Boost 1 End	Greater Than −15°C (5°F)	Greater Than −12 V	Battery has a net loss less than 0.2 AH	First level Idle boost request cancelled
Load Shed 1 Start	—	—	Battery has a net loss of 4 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 End	—	Greater Than 12 V	Battery has a net loss of less than 2 AH	Clear Load Shed 1
Idle Boost 2 Start	—	—	Battery has a net loss greater than 1.6 AH	Second level Idle boost requested
Idle Boost 2 Start	—	Less Than 10.9 V	—	Second level Idle boost requested
Idle Boost 2 End	—	Greater Than 12 V	Battery has a net loss less than 0.8 AH	Second level Idle boost request cancelled
Idle Boost 3 Start	—	—	Battery has a net loss of 10.0 AH	Third level Idle boost requested
Idle Boost 3 Start	—	Less Than 10.9 V	—	Third level Idle boost requested
Idle Boost 3 End	—	Greater Than 12 V	Battery has a net loss of less than 6.0 AH	Third level Idle boost request cancelled
Load Shed 2 Start	—	Less Than 10.9 V	Battery has a net loss greater than 12 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Load Shed 2 End	—	Greater Than 12.6 V	Battery has a net loss of less than 10.5 AH	Clear Load Shed 2
Load Shed 3 Start	—	Less Than 11.9 V	Battery has a net loss greater than 20 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 3 End	—	Greater Than 12.6 V	Battery has a net loss of less than 15 AH	Clear Load Shed 3

Electrical Power Management Description and Operation (Diesel)

The electrical power management is used to monitor and control the charging system and alert the driver of possible problems within the charging system. The electrical power management system makes the most efficient use of the generator output, improves the battery state-of-charge, extends battery life, and manages system electrical loads.

The load shed operation is a means of reducing electrical loads during a low voltage or low battery state-of-charge condition.

The idle boost operation is a means of improving generator performance during a low voltage or low battery state-of-charge condition. Idle boost consists of three steps: idle boost 1, idle boost 2, and idle boost 3 (approximately 725, 850, and 850 rpm respectively). Idle boost is activated in incremental steps, idle boost 1 must be active before idle boost 2 can be active.

Each electrical power management function, either idle boost or load shed, is discrete. No two functions are active at the same time. The criteria used by the body control module (BCM) to regulate electrical power management are outlined below:

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Idle Boost 1 Start	Less Than −15°C (5°F)	Less Than 13 V	—	First level Idle boost requested
Idle Boost 1 Start	—	—	Battery has a net loss greater than 0.6 AH	First level Idle boost requested
Idle Boost 1 Start	—	Less Than 10.9 V	—	First level Idle boost requested
Idle Boost 1 End	Greater Than −15°C (5°F)	Greater Than −12 V	Battery has a net loss less than 0.2 AH	First level Idle boost request cancelled
Load Shed 1 Start	—	—	Battery has a net loss of 4 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle
Load Shed 1 End	—	Greater Than 12 V	Battery has a net loss of less than 2 AH	Clear Load Shed 1
Idle Boost 2 Start	—	—	Battery has a net loss greater than 1.6 AH	Second level Idle boost requested
Idle Boost 2 Start	—	Less Than 10.9 V	—	Second level Idle boost requested
Idle Boost 2 End	—	Greater Than 12 V	Battery has a net loss less than 0.8 AH	Second level Idle boost request cancelled
Idle Boost 3 Start	—	—	Battery has a net loss of 10.0 AH	Third level Idle boost requested
Idle Boost 3 Start	—	Less Than 10.9 V	—	Third level Idle boost requested
Idle Boost 3 End	—	Greater Than 12 V	Battery has a net loss of less than 6.0 AH	Third level Idle boost request cancelled

Function	Battery Temperature Calculation	Battery Voltage Calculation	Amp-Hour Calculation	Action Taken
Load Shed 2 Start	—	Less Than 10.9 V	Battery has a net loss greater than 12 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 Start	—	Less Than 10.9 V	—	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 2 End	—	Greater Than 12.6 V	Battery has a net loss of less than 10.5 AH	Clear Load Shed 2
Load Shed 3 Start	—	Less Than 11.9 V	Battery has a net loss greater than 20 AH	Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC
Load Shed 3 End	—	Greater Than 12.6 V	Battery has a net loss of less than 15 AH	Clear Load Shed 3

Starting System Description and Operation

Starter Motor Operation (Without KL9)

The starter motors are non-repairable. They have pole pieces that are arranged around the armature. Both solenoid windings are energized. The pull-in winding circuit is completed to the ground through the starter motor. The windings work together magnetically to pull and hold in the plunger. The plunger moves the shift lever. This action causes the starter drive assembly to rotate on the armature shaft spline as it engages with the flywheel ring gear on the engine. Moving at the same time, the plunger also closes the solenoid switch contacts in the starter solenoid. Full battery voltage is applied directly to the starter motor and it cranks the engine.

As soon as the solenoid switch contacts close, current stops flowing thorough the pull-in winding because battery voltage is applied to both ends of the windings. The hold-in winding remains energized. Its magnetic field is strong enough to hold the plunger, shift lever, starter drive assembly, and solenoid switch contacts in place to continue cranking the engine. When the engine starts, pinion overrun protects the armature from excessive speed until the switch is opened.

When the crank signal is removed, the starter relay opens and battery voltage is removed from the starter solenoid S terminal. Current flows from the motor contacts through both windings to the ground at the end of the hold-in winding. However, the direction of the current flow through the pull-in winding is now opposite the direction of the current flow when the winding was first energized.

The magnetic fields of the pull-in and hold-in windings now oppose one another. This action of the windings, along with the help of the return spring, causes the starter drive assembly to disengage and the solenoid switch contacts to open simultaneously. As soon as the contacts open, the starter circuit is turned off.

Enhanced Starter Motor Operation (KL9)

The Engine Stop/Start system in GM vehicles automatically turns off the engine when the vehicle comes to a stop under certain driving conditions, and can quickly restart the engine in about 0.3 seconds when commanded to do so.

In order to smoothly restart the engine as quickly as possible while managing the greater number of engine starts, the Stop/Start system uses an enhanced starter motor that operates differently from a conventional starter motor. It has a high performance electric motor and a stronger pinion engagement mechanism than a conventional starter. It also has independent control of the pinion and motor.

The enhanced starter motor continues using the typical pinion engagement mechanism with a starter solenoid that drives the pinion gear to engage or disengage the flywheel of the engine. When engaged, the starter motor can rotate the engine flywheel and, in turn, the crankshaft.

On the enhanced starter of a Stop/Start system the operation is done in two separate functions inside the solenoid, Starter Motor and Pinion Actuator. Each

function controlled individually by the ECM. There are two separate relays to control the two separate parts of the enhanced solenoid:

- KR27 Starter Motor Relay
- KR27C Starter Pinion Actuator Relay

The two individually-controlled relays allow for smooth engagement of the pinion gear into the flywheel with minimum noise and wear.

When the vehicle is coming to a stop, just before the engine stops rotating (at approximately 50 RPM) during stop/start operation, the ECM energizes the Starter Pinion Solenoid Actuator Relay to easily push the pinion gear into the flywheel gear without gear clash. (Fig. 8) When the engine stops rotating during Stop/Start operation (Auto Stop mode), the starter pinion gear is fully engaged, ready for the starter motor to become energized to quickly start the engine again.

A secondary need for the starter pinion to be driven into the flywheel gear before the engine stops rotating is to address quickly changing demands on the engine. For example, when a driver is slowing nearly to a stop — and the Stop/Start system is preparing for Auto Stop mode — but suddenly decides to release the brake and accelerate

In this situation, the engine has already stopped rotating, or nearly so. A conventional starter cannot restart the engine until the engine has completely stopped. However, with the enhanced starter, the starter pinion gear is fully engaged and ready to begin rotating the engine even before it fully stops turning. Otherwise, the engine would actually have to stop rotating before the pinion can engage smoothly to begin a restart.

To prevent a lag in engine operation, the ECM uses predictive speed matching of the flywheel gear speed and the pinion gear speed to engage the pinion gear into the flywheel gear without gear clash before the engine fully stops. By predicting how long it takes the starter motor to spin up using an algorithm, the pinion gear speed can be matched to the flywheel gear speed. The result is an almost instant restart that is possible at extremely low engine speeds.

Circuit Description

Keyless Start

When the Ignition mode switch is placed in the crank position, a discrete signal is supplied to the body control module (BCM) notifying it that the ignition is in the crank position. The BCM then sends a serial data message to the engine control module (ECM) that crank has been requested. The ECM then verifies that the brake pedal is applied and for manual transmission the clutch is fully depressed or for automatic transmission is in Park/Neutral. If it is, the ECM then supplies 12 V to the control circuit of the starter relay. When this occurs, battery positive voltage is supplied through the switch side of the crank relay to the S terminal of the starter solenoid.

Key Start

When the ignition switch is placed in the Start position, a discrete signal is supplied to the body control module (BCM) notifying it that the ignition is in the Start position. The BCM then sends a message to the engine control module (ECM) notifying it that CRANK has been requested. The ECM verifies that the transmission is in Park or Neutral. If it is, the ECM then supplies 12 V to the control circuit of the crank relay. When this occurs, battery positive voltage is supplied through the switch side of the crank relay to the S terminal of the starter solenoid.

Section 5

HVAC

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Air Delivery Description and Operation 5-12
Air Temperature Description and Operation 5-13

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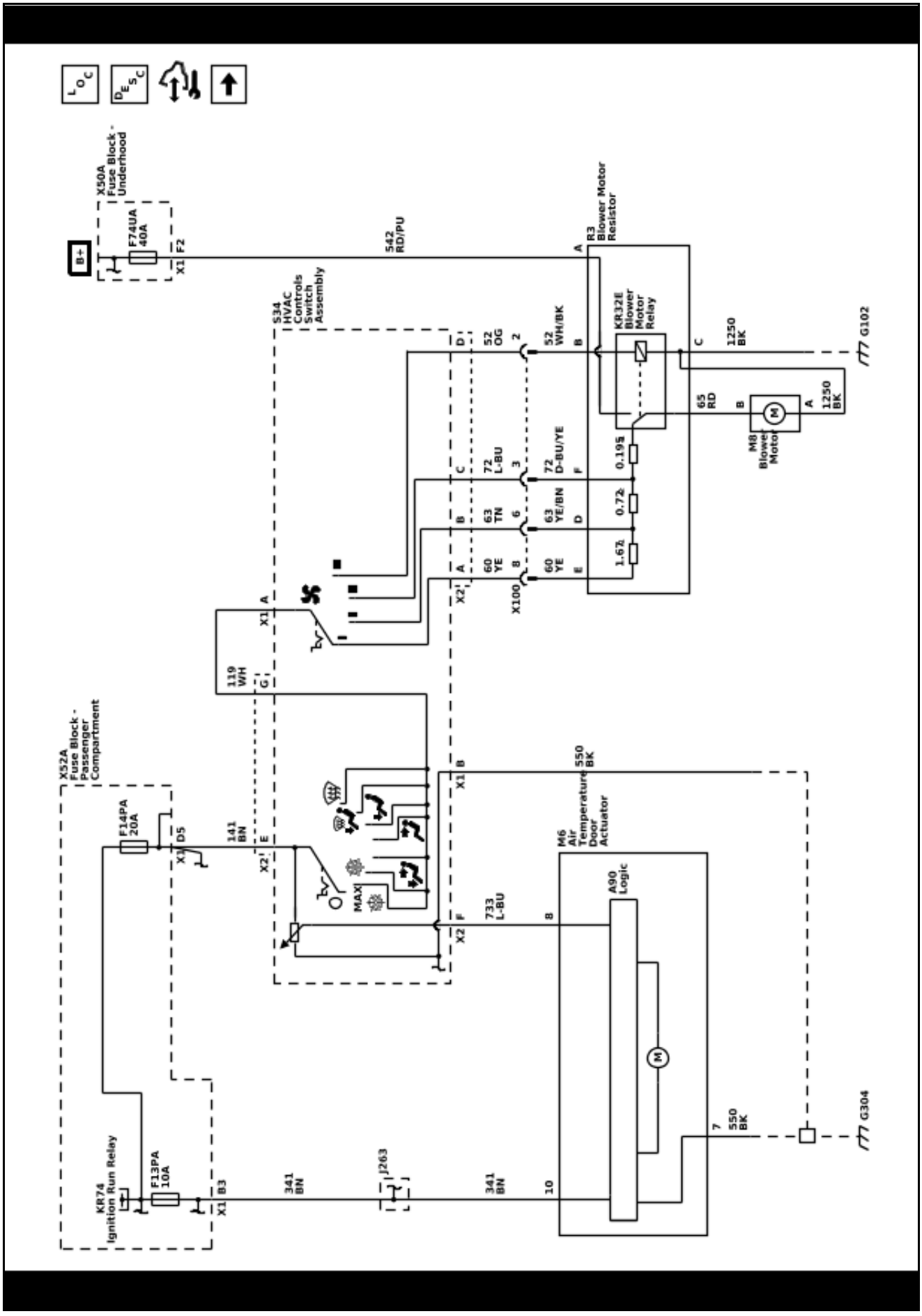
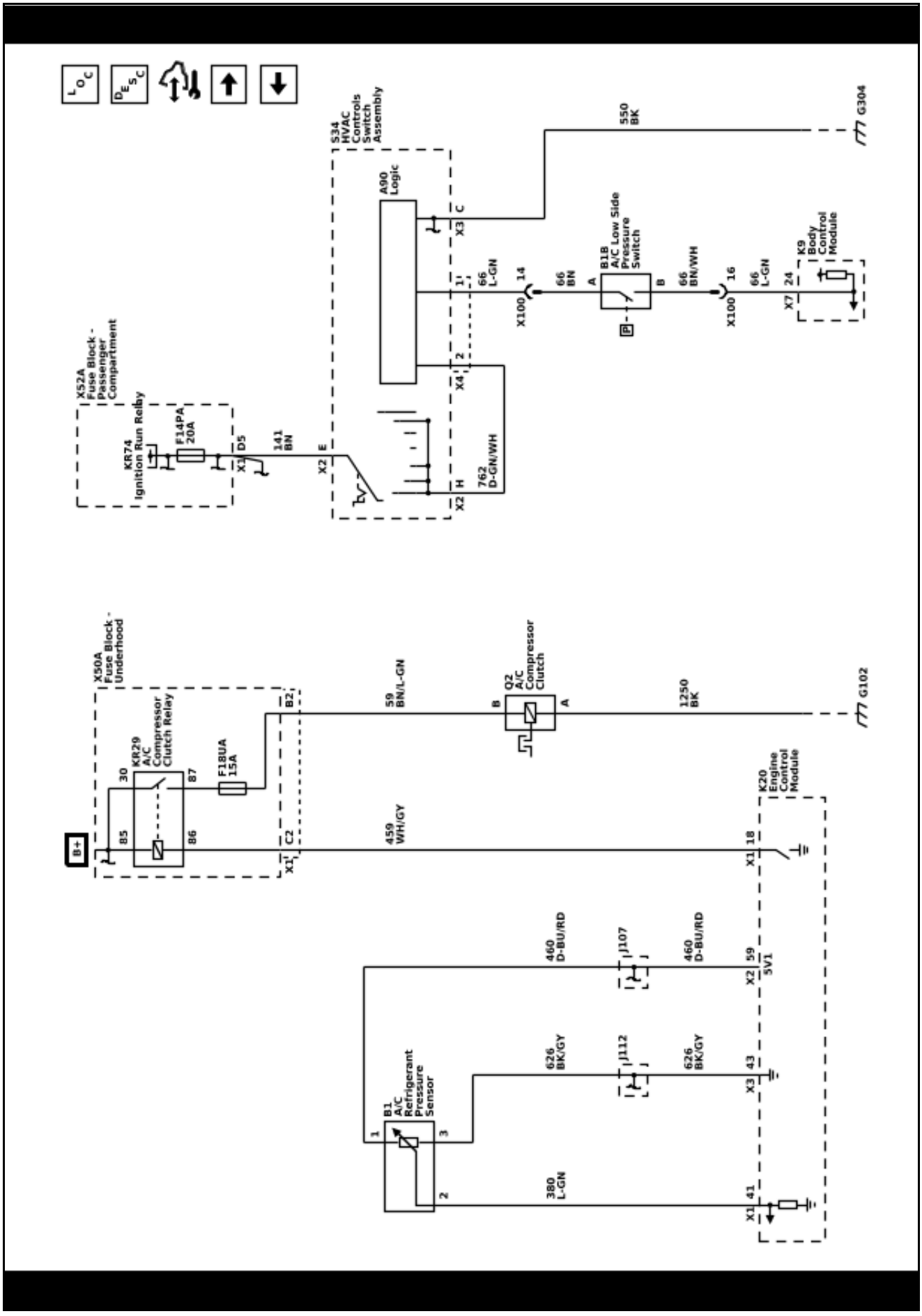
HVAC - Manual

Schematic and Routing Diagrams

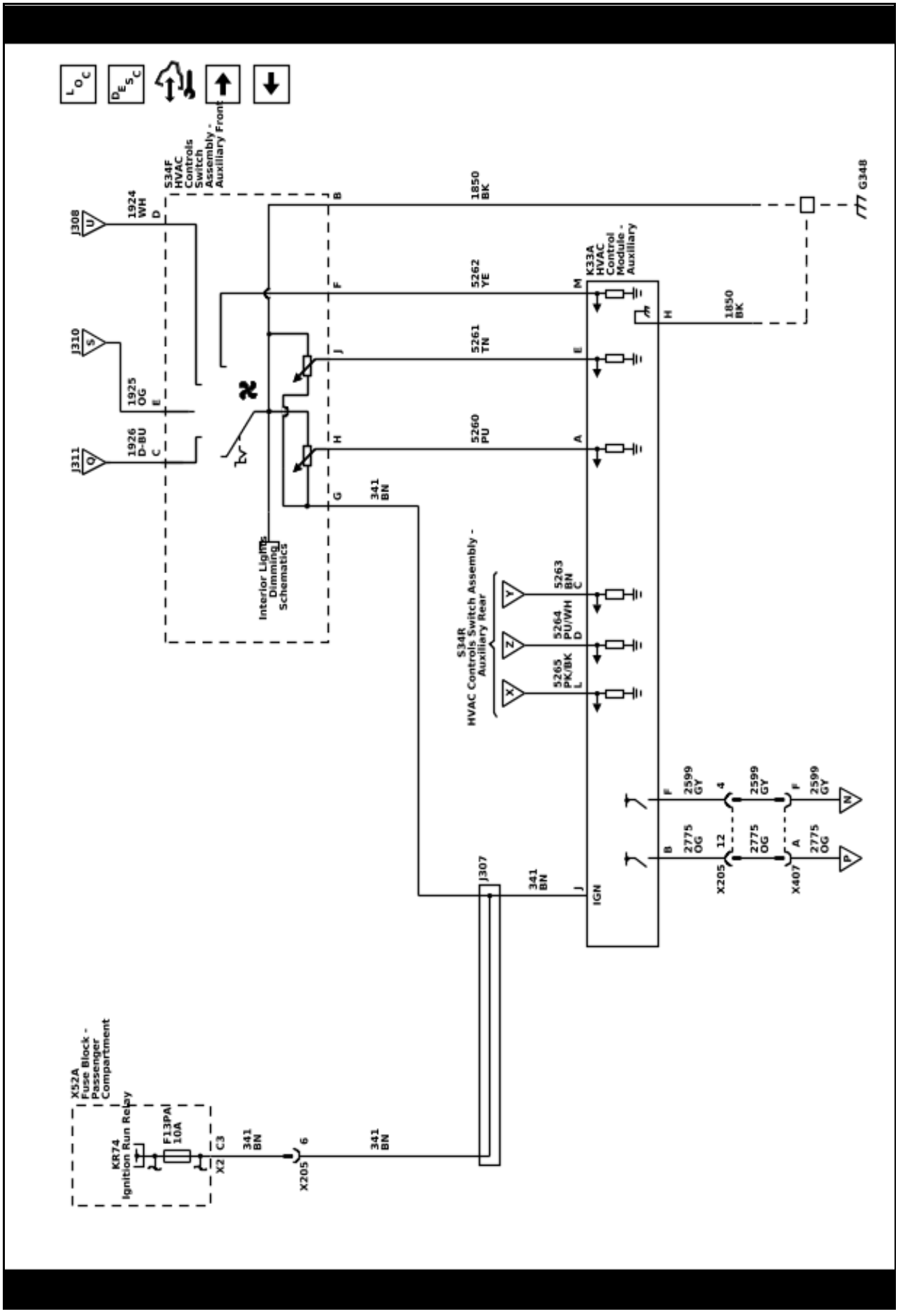
HVAC Schematics (Front Air Delivery Controls and Front Blower Motor)



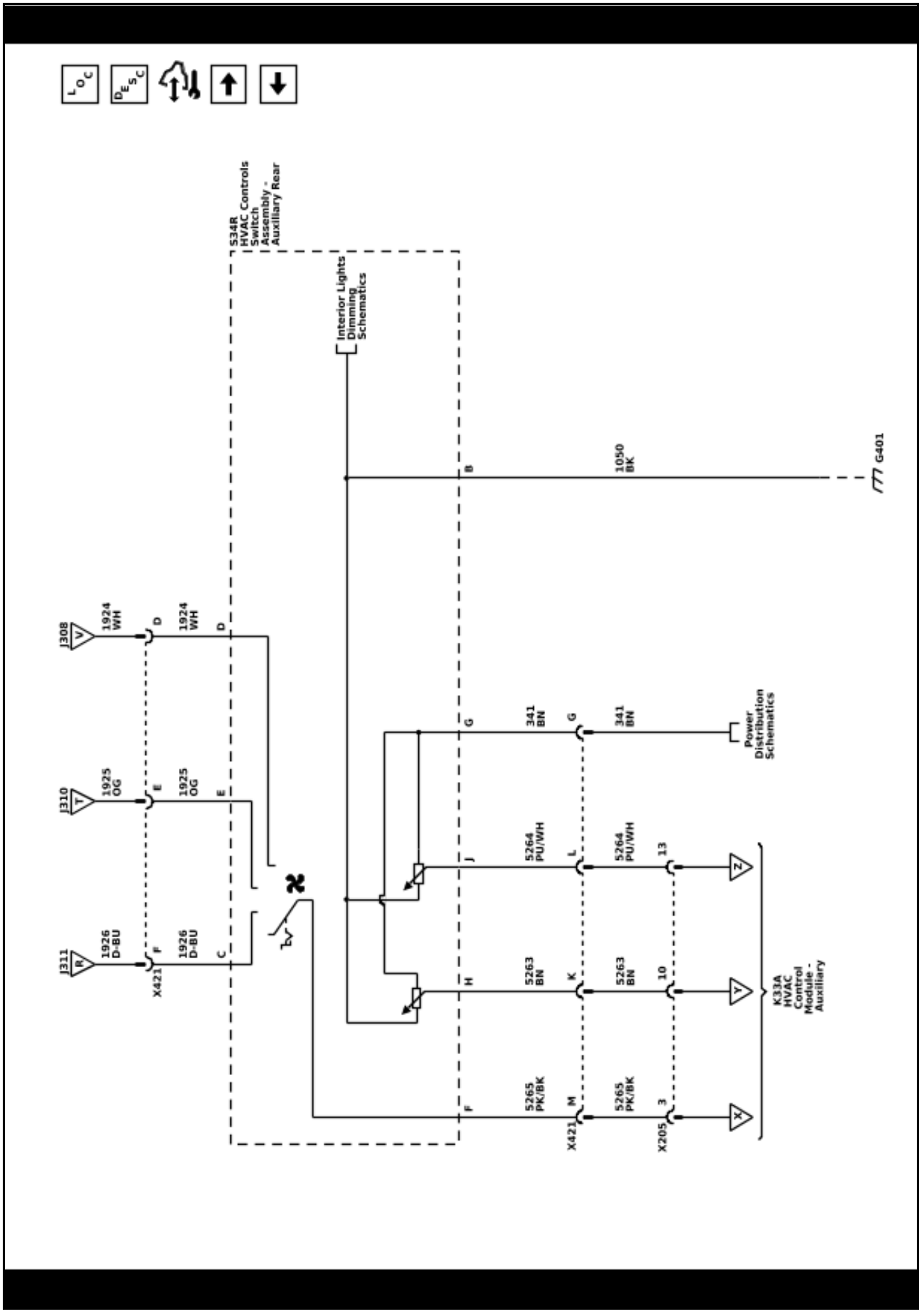
HVAC Schematics (Compressor Controls (C60))



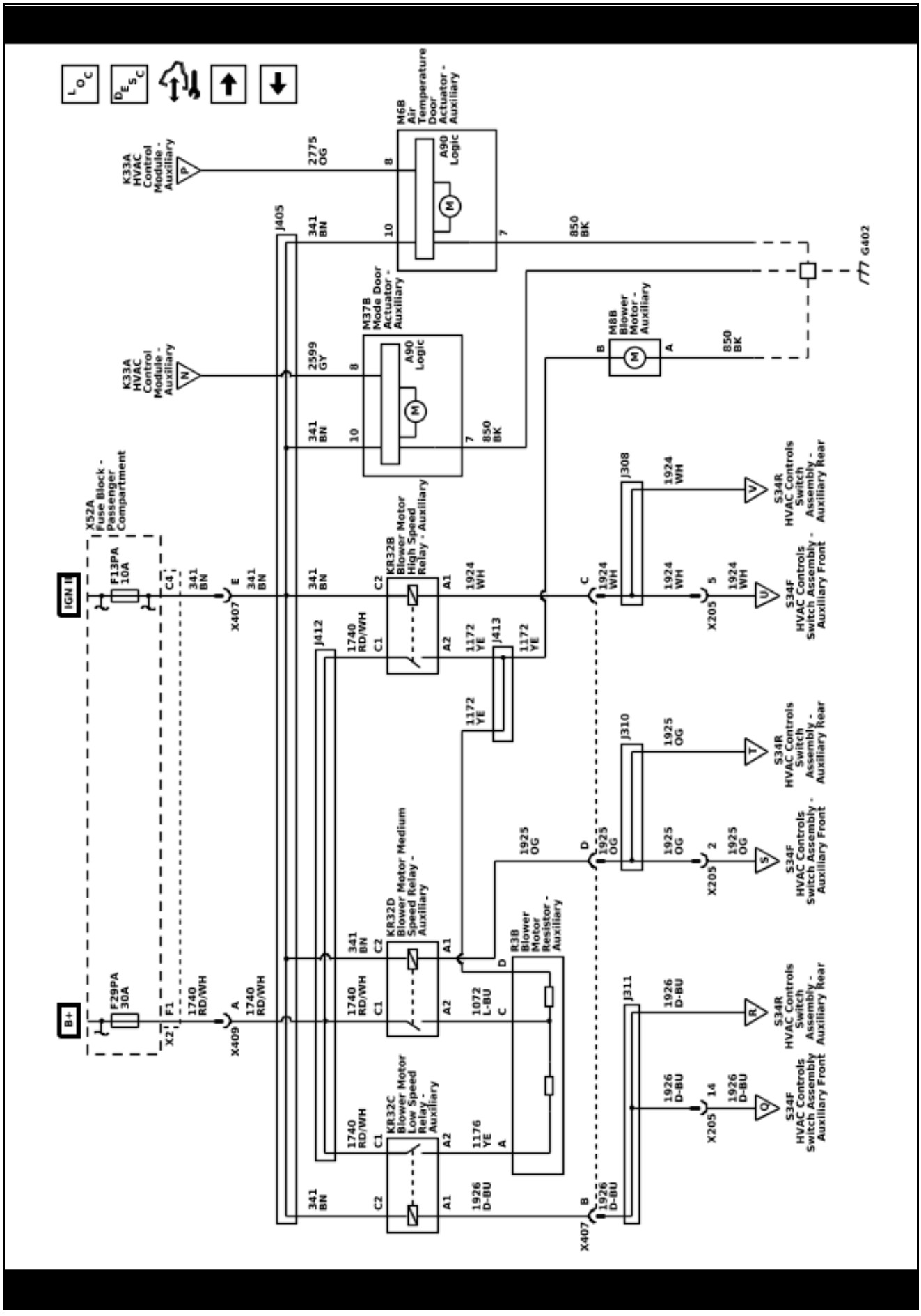
HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), with Rear HVAC Controls - Air Delivery Controls)



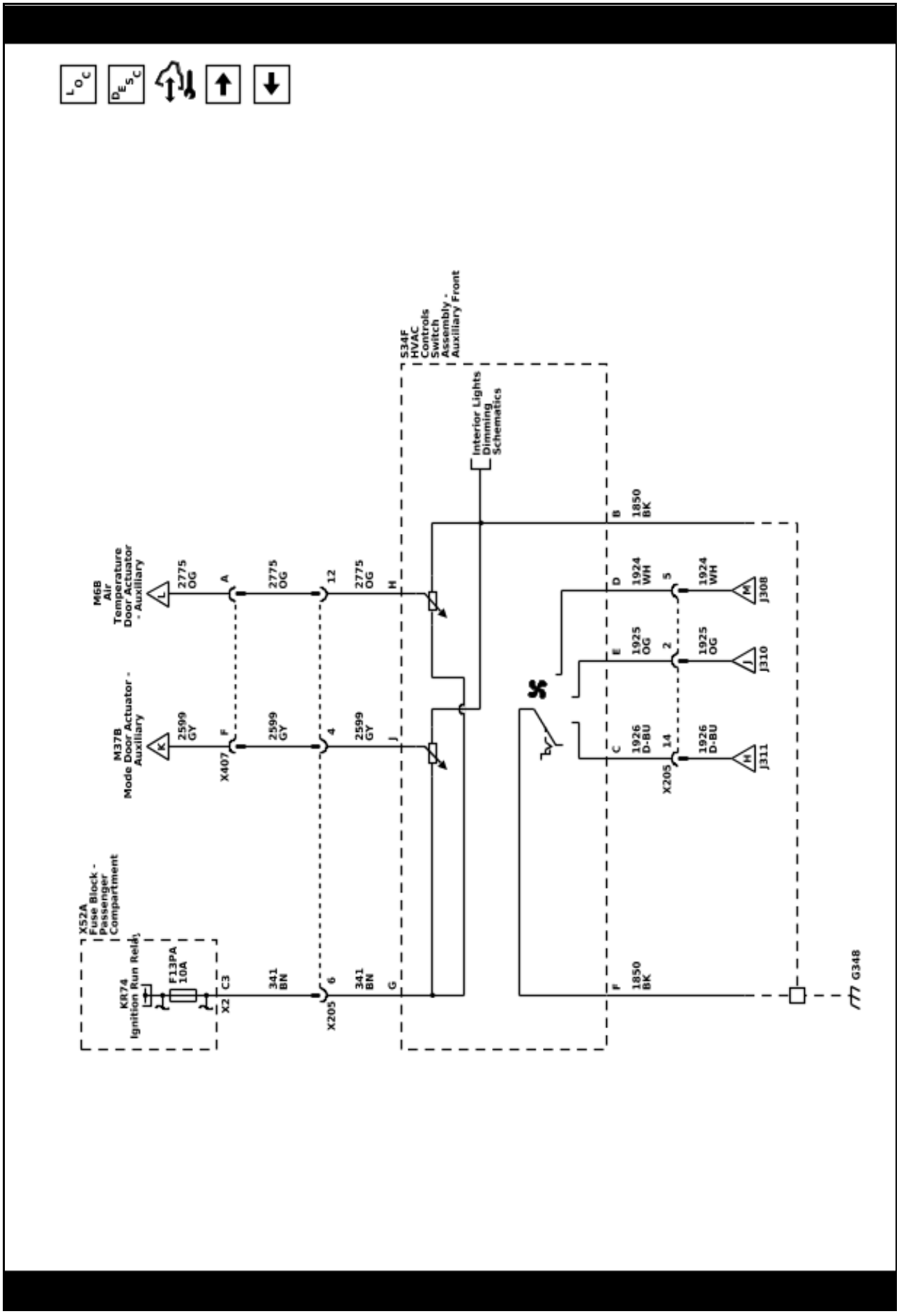
HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), with Rear HVAC Controls - Rear Controls)



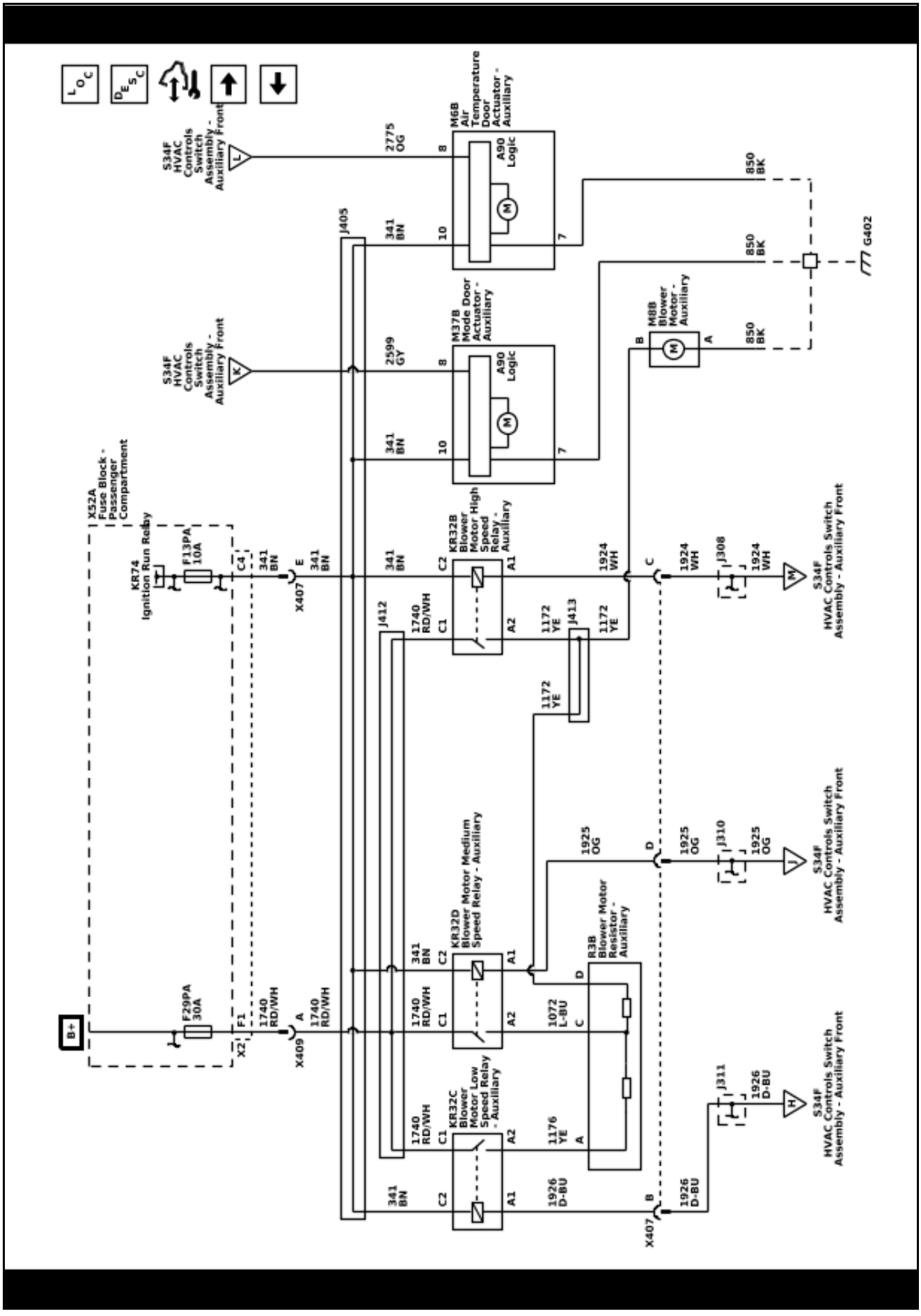
HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), with Rear HVAC Controls - Front Controls)



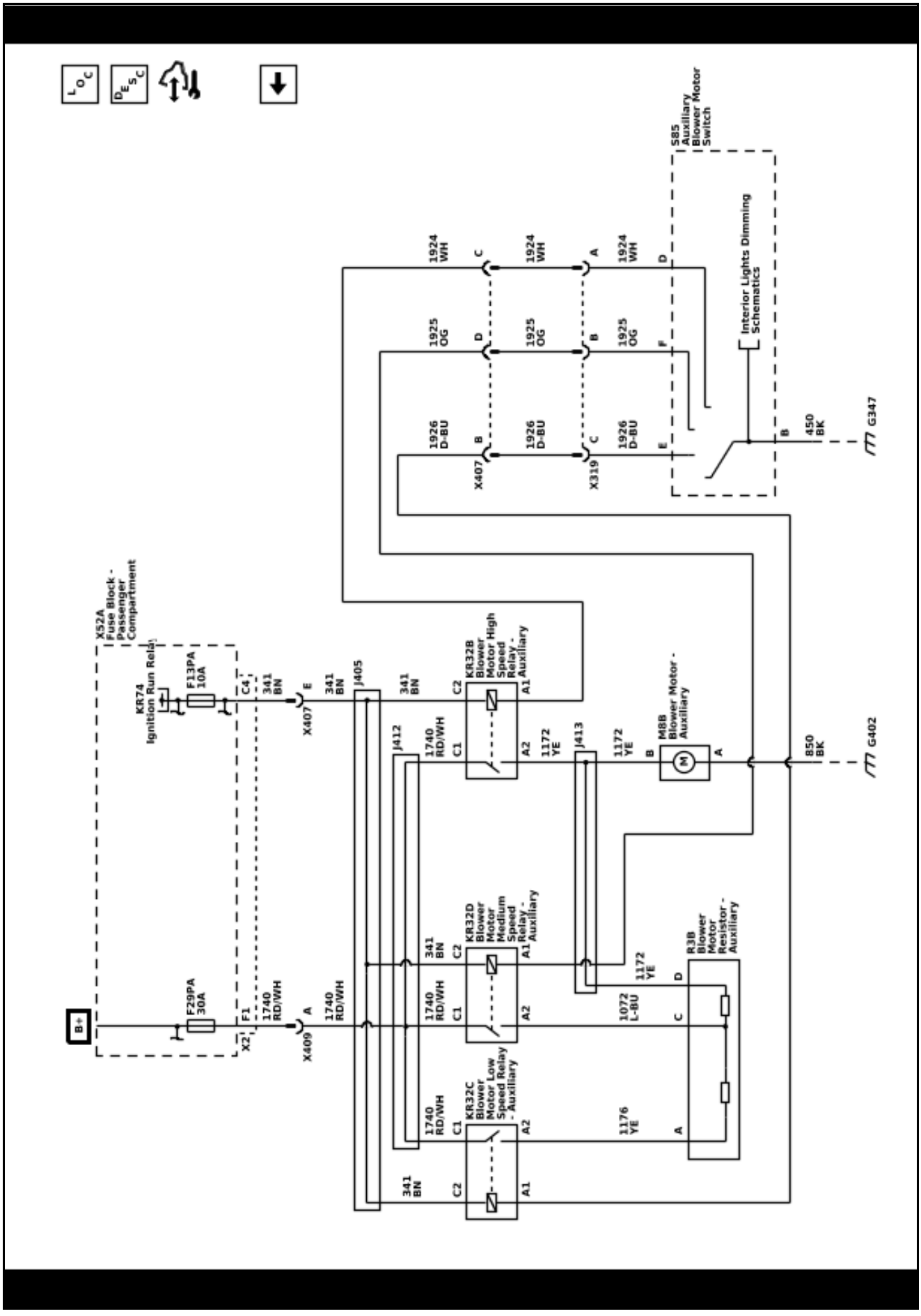
HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), without Rear HVAC Controls - Air Delivery Controls)



HVAC Schematics (Rear HVAC with Rear Air Conditioning (C69), without Rear HVAC Controls - Front Controls)



HVAC Schematics (Rear HVAC without Rear Air Conditioning (C36 without C69))



Description and Operation

Air Delivery Description and Operation

The air delivery description and operation is divided into the following:

- HVAC Control Assembly
- Air Speed
- Auxiliary Air Speed
- Air Distribution
- Auxiliary Air Delivery

HVAC Control Assembly

The HVAC control assembly is a non-class 2 device that interfaces between the operator and the HVAC system to maintain air temperature and distribution settings. The ignition 3 voltage circuit provides power to the control assembly. Two integrated potentiometers control air temperature door position and blower motor speed. The integrated vacuum system controls the position of the mode doors.

Air Speed

The HVAC control assembly applies voltage to the blower motor control circuit that corresponds to the selected blower speed. The resistors and the blower motor are in a series circuit. The following list represents the number of resistors in series with the blower motor per particular speed request:

- Low speed-3 resistors
- Medium 1 speed-2 resistors
- Medium 2 speed-1 resistor

When the operator requests High speed, the HVAC control assembly applies voltage to the blower motor relay through the high blower motor control circuit. The voltage energizes the blower motor relay, connecting the blower motor to battery positive voltage.

Auxiliary Air Speed

The auxiliary HVAC control assembly applies voltage to the auxiliary blower motor control circuit that corresponds to the selected blower speed. The resistors and the blower motor are in a series circuit. The following list represents the number of resistors in series with the blower motor per particular speed request:

- Low speed-2 resistors
- Medium speed-1 resistor

When the operator requests High speed, the HVAC control assembly applies voltage to the blower motor relay through the auxiliary high blower motor control circuit. The voltage energizes the blower motor relay, connecting the blower motor to battery positive voltage.

Air Distribution

The HVAC control assembly uses vacuum to control the mode door position. Vacuum is supplied to the control assembly and a vacuum tank by either an engine vacuum source, or a vacuum pump when the vehicle is equipped with a diesel engine..

Vacuum Pump (Diesel Engines)

The mechanical vacuum pump operates when the engine is running. The vacuum pump supplies vacuum to the HVAC control assembly and vacuum tank.

Mode Switch

The mode switch is a rotary vacuum valve that directly applies vacuum to the appropriate vacuum actuator. Use the mode switch to change the air delivery mode in the vehicle.

MAX A/C (If Equipped)

The mode switch applies vacuum to ports 1, 3, and 4. The mode actuators have vacuum applied to them, directing airflow to the vents. The recirculation actuator has vacuum applied to it positioning the recirculation door to recirculate air within the vehicle. A/C compressor operation is requested.

A/C (If Equipped)

The mode switch applies vacuum to ports 1 and 3. The mode actuators have vacuum applied to them, directing airflow to the vents. A/C compressor operation is requested.

Bi-Level Mode

The mode switch applies vacuum to ports 3 and 5. The inner mode and defrost actuators have vacuum applied to them, directing airflow to the vents and floor.

Vent Mode

The mode switch applies vacuum to ports 1 and 3. The mode actuators have vacuum applied to them, directing airflow to the vents.

Floor Mode

The mode switch applies vacuum to port 5. The defrost actuator has vacuum applied to it, directing airflow to the floor.

Mix-Blend Mode

The mode switch vents all ports. With no vacuum at any port, the following occurs:

- Vacuum is bled off the defrost actuator, keeping it in a neutral position. The defroster door is held stationary in the half-open directing airflow through the defroster and floor outlets.
- A/C compressor operation is requested.

Defrost Mode

The mode switch applies vacuum to port 7 and the following occurs:

- The defrost actuator has vacuum applied to it directing airflow through the defroster outlet.
- A/C compressor operation is requested.

Auxiliary Air Distribution (C69)

Auxiliary HVAC Control Processor

The auxiliary HVAC control processor controls all outputs for the auxiliary HVAC system. The auxiliary HVAC control processor receives inputs from the front and rear auxiliary HVAC control assemblies. The auxiliary HVAC control processor does not utilize Class 2 communications. If the auxiliary HVAC control processor receives a 12V varied voltage input for an

auxiliary air temperature actuator change request. Then the auxiliary HVAC control processor creates a 12V varied output for control of the auxiliary air temperature actuator.

Auxiliary Mode Actuator

The auxiliary mode actuator is a 3 wire bi-directional electric motor. Ignition 3 voltage, ground and control circuits enable the actuator to operate. The control circuit uses a 0-12V linear-ramped signal to command the actuator movement. The 0 and 12V control values represent the opposite limits of the actuator range of motion. The values in between 0 and 12V correspond to the positions between the limits. When the HVAC control assembly sets a commanded, or targeted, value, the control signal is set to a value between 0-12V. The actuator shaft rotates until the commanded position is reached. The module will maintain the control value until a new commanded value is needed.

The rear auxiliary air delivery and the temperature controls work independently of the ventilation controls used for the front of the vehicle. The rear auxiliary mode door and the rear auxiliary temperature door are exclusively controlled from either of the 2 auxiliary HVAC controls. The front auxiliary HVAC controls has a permissive position called REAR. The REAR position enables control from the rear auxiliary HVAC controls.

Air Temperature Description and Operation

The air temperature controls are divided into five areas.

- HVAC Control Components
- Heating and A/C Operation
- Auxiliary Heating and A/C Operation
- Engine Coolant
- A/C Cycle

HVAC CONTROL COMPONENTS

HVAC Control Assembly

The HVAC control assembly is a non-class 2 device that interfaces between the operator and the HVAC system to maintain air temperature and distribution settings. The ignition 3 voltage circuits provide power to the control assembly. Two integrated potentiometers control air temperature door position and blower motor speed. The integrated vacuum system controls the mode door position.

Auxiliary HVAC Control Processor

The auxiliary HVAC control processor controls all outputs for the auxiliary HVAC system. The auxiliary HVAC control processor receives inputs from the front and rear auxiliary HVAC control assemblies. The auxiliary HVAC control processor does not utilize Class 2 communications.

If the auxiliary HVAC control processor receives a 12-volt varied voltage input for an auxiliary air temperature actuator change request. Then the auxiliary HVAC control processor creates a 12-volt varied output for control of the auxiliary air temperature actuator.

Air Temperature Actuator

The air temperature actuator and auxiliary air temperature actuator are a 3-wire bi-directional electric motor. Ignition 3 voltage, ground and control circuits enable the actuator to operate. The control circuit uses a 0–12-volt linear-ramped signal to command the actuator movement. The 0 and 12-volt control values represent the opposite limits of the actuator range of motion. The values in between 0 and 12 volts correspond to the positions between the limits.

When the HVAC control assembly sets a commanded, or targeted, value, the control signal is set to a value between 0–12 volts. The actuator shaft rotates until the commanded position is reached. The module will maintain the control value until a new commanded value is needed.

A/C Pressure Switches

The A/C system is protected by two A/C pressure switches.

- A/C low pressure switch
- A/C high pressure switch

The A/C high pressure switch interrupts the A/C request signal when the A/C line pressure is more than a predetermined value. The A/C low pressure switch interrupts the A/C low pressure switch signal when the A/C line pressure is less than or more than a predetermined value. When the powertrain control module (PCM) stops receiving the required signals, the A/C compressor clutch relay control circuit is no longer grounded, disengaging the A/C compressor clutch. The A/C compressor clutch is disengaged under the following conditions:

- A/C low pressure switch is less than 152 kPa (22 psi).
- A/C low pressure switch is more than 310 kPa (45 psi).
- A/C high pressure switch is more than 2896 kPa (420 psi).

Bypass Valves

The bypass valves included in the air temperature system are:

- Coolant Bypass Valve
- Hot Water Bypass Valve

The bypass valve is a normally open valve, which closes when vacuum is applied to the valve. When the MAX A/C mode is selected, vacuum from the HVAC control assembly is applied to the bypass valve. The vacuum must be strong enough to overcome the tension of the valve's internal return spring in order to close the bypass valve. The return spring forces the valve to return to the open position, when any of the other HVAC modes are selected. In the closed position, the flow of coolant to the heater core is bypassed, allowing maximum cooling to the passenger compartment.

Heating and A/C Operation

The purpose of the heating and A/C system is to provide heated and cooled air to the interior of the vehicle. The A/C system will also remove humidity from the interior and reduce windshield fogging. The vehicle operator can determine the passenger compartment

temperature by adjusting the air temperature switch. Regardless of the temperature setting, the following can effect the rate that the HVAC system can achieve the desired temperature:

- Recirculation
- Difference between inside and desired temperature
- Difference between ambient and desired temperature
- Blower motor speed setting
- Mode setting
- Auxiliary HVAC settings

The A/C system can be engaged by placing the mode switch in one of the following positions:

- Max A/C
- A/C
- Bi-Level
- Blend
- Defrost

The A/C system can operate regardless of the temperature setting. Regardless of the selected A/C mode setting, a request is sent to the PCM to turn on the A/C compressor clutch.

The following conditions must be met in order for the PCM to turn on the compressor clutch:

- Ambient air temperature is greater than 3°C (38°F)
- Engine coolant temperature (ECT) is less than 123°C (253°F)
- Engine speed is less than 5000 RPM
- The A/C compressor cycling switch pressure is between 124-388 kPa (18-49 psi)
- The A/C high pressure cutout switch is less than 2896 kPa (420 psi)

Once engaged, the compressor clutch will be disengaged for the following conditions:

- Throttle position is 100 percent
- The A/C compressor cycling switch pressure is less than 124 kPa (18 psi) or more than 338 kPa (49 psi)
- The A/C high pressure cutout switch is more than 2896 kPa (420 psi)
- Engine coolant temperature (ECT) is more than 123°C (253°F)
- Engine speed is more than 5000 RPM
- Transmission shift
- PCM detects excessive torque load
- PCM detects insufficient idle quality
- PCM detects a hard launch condition

When the compressor clutch disengages, the compressor clutch diode protects the electrical system from a voltage spike.

Heater Mode – Auxiliary Heater without A/C

The auxiliary blower motor recycles air from the vehicle's interior. The vehicle operator can determine the intensity of the auxiliary heater by placing the auxiliary blower motor in one of the following positions:

- Low
- Med
- High

Since there is no temperature switch, the temperature is controlled by the speed of the auxiliary blower motor. The auxiliary blower motor will only operate when the ignition is in the RUN position, and the auxiliary blower motor switch is in any position other than OFF.

Heater Mode – Front Auxiliary HVAC Control Assembly Only

The auxiliary temperature switch in the front auxiliary HVAC control assembly allows the vehicle operator to adjust the temperature in the rear of the vehicle. Power is provided to both the front auxiliary HVAC control assembly and the auxiliary air temperature actuator from the instrument panel (I/P) fuse block on the ignition 3 voltage circuit.

Voltage delivered to the front auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a variable resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

Heater Mode – Front Auxiliary HVAC Control Assembly with Rear Auxiliary HVAC Control Assembly

The auxiliary temperature switch in the front auxiliary HVAC control assembly allows the vehicle operator to adjust the temperature in the rear of the vehicle. Power is provided to both the front auxiliary HVAC control assembly and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

Voltage delivered to the front auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a varied resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit, and auxiliary HVAC control processor. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature

Heater Mode – Rear Auxiliary HVAC Control Assembly

The auxiliary temperature switch in the rear auxiliary HVAC control assembly allows the rear seat passengers to adjust the temperature in the rear of the vehicle. Power is provided to the rear auxiliary HVAC control assembly, auxiliary HVAC control processor and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

To activate the rear auxiliary HVAC control assembly, the front auxiliary HVAC control assembly must be placed in the REAR CNTL position. Ignition 3 voltage is

sent to the auxiliary HVAC control processor. When the switch is placed in the REAR CNTL position, the voltage is grounded through the auxiliary blower motor switch control, front auxiliary HVAC control assembly and the ground circuit to allow the rear auxiliary HVAC control assembly to operate the auxiliary temperature actuator. Voltage delivered to the rear auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a variable resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit, and auxiliary HVAC control processor. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

A/C Mode – Front Auxiliary HVAC Control Assembly Only

The auxiliary temperature switch in the front auxiliary HVAC control assembly allows the vehicle operator to adjust the temperature in the rear of the vehicle. Power is provided to both the front auxiliary HVAC control assembly and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

Voltage delivered to the front auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a variable resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

A/C Mode – Front Auxiliary HVAC Control Assembly with Rear Auxiliary HVAC Control Assembly

The auxiliary temperature switch in the front auxiliary HVAC control assembly allows the vehicle operator to adjust the temperature in the rear of the vehicle. Power is provided to both the front auxiliary HVAC control assembly and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

Voltage delivered to the front auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a variable resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit, and auxiliary HVAC control processor. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

A/C Mode – Rear Auxiliary HVAC Control Assembly

The auxiliary temperature switch in the rear auxiliary HVAC control assembly allows the rear seat passengers to adjust the temperature in the rear of the vehicle. Power is provided to the rear auxiliary HVAC control assembly, auxiliary HVAC control processor and the auxiliary air temperature actuator from the (I/P) fuse block on the ignition 3 voltage circuit.

To activate the rear auxiliary HVAC control assembly, the front auxiliary HVAC control assembly must be placed in the REAR CNTL position. Ignition 3 voltage is sent to the auxiliary HVAC control processor. When the switch is placed in the REAR CNTL position, the voltage is grounded through the auxiliary blower motor switch control, front auxiliary HVAC control assembly and the ground circuit to allow the rear auxiliary HVAC control assembly to operate the auxiliary temperature actuator. Voltage delivered to the rear auxiliary HVAC control assembly on the ignition 3 voltage circuit is sent to a varied resistor. Based on the placement of the temperature switch, a varied voltage is sent to the auxiliary air temperature actuator on the auxiliary air temperature door control circuit, and auxiliary HVAC control processor. The auxiliary air temperature actuator positions the temperature door to divert the appropriate amount of air past the heater core in order to achieve the desired temperature.

Engine Coolant

Engine coolant is the key element of the heating system. The thermostat controls engine operating coolant temperature. The thermostat also creates a restriction for the cooling system that promotes a positive coolant flow and helps prevent cavitation. Coolant enters the heater core through the inlet heater hose, in a pressurized state.

The heater core is located inside the HVAC module. The heat of the coolant flowing through the heater core is absorbed by the ambient air drawn through the HVAC module. Heated air is distributed to the passenger compartment, through the HVAC module, for passenger comfort.

The amount of heat delivered to the passenger compartment is controlled by opening or closing the HVAC module air temperature door. The coolant exits the heater core through the return heater hose and recirculated back through the engine cooling system.

A/C Cycle

Refrigerant is the key element in an air conditioning system. R-134a is presently the only EPA approved refrigerant for automotive use. R-134a is an very low temperature gas that can transfer the undesirable heat and moisture from the passenger compartment to the outside air.

The A/C compressor is belt driven and operates when the magnetic clutch is engaged. The compressor builds pressure on the vapor refrigerant. Compressing the refrigerant also adds heat to the refrigerant. The refrigerant is discharged from the compressor, through the discharge hose, and forced to flow to the condenser and then through the balance of the A/C system. The A/C system is mechanically protected with the use of a high pressure relief valve. If the high pressure switch were to fail or if the refrigerant system becomes restricted and refrigerant pressure continued to rise, the high pressure relief will pop open and release refrigerant from the system.

Compressed refrigerant enters the condenser in a high temperature, high pressure vapor state. As the refrigerant flows through the condenser, the heat of the refrigerant is transferred to the ambient air passing through the condenser. Cooling the refrigerant causes the refrigerant to condense and change from a vapor to a liquid state.

The condenser is located in front of the radiator for maximum heat transfer. The condenser is made of aluminum tubing and aluminum cooling fins, which allows rapid heat transfer for the refrigerant. The semi-cooled liquid refrigerant exits the condenser and flows through the liquid line, to the orifice tube.

The orifice tube is located in the liquid line between the condenser and the evaporator. The orifice tube is the dividing point for the high and the low pressure sides of the A/C system. As the refrigerant passes through the orifice tube, the pressure on the refrigerant is lowered. Due to the pressure differential on the liquid refrigerant, the refrigerant will begin to vaporize at the orifice tube. The orifice tube also meters the amount of liquid refrigerant that can flow into the evaporator.

Refrigerant exiting the orifice tube flows into the evaporator core in a low pressure, liquid state. Ambient air is drawn through the HVAC module and passes through the evaporator core. Warm and moist air will cause the liquid refrigerant boil inside of the evaporator core. The boiling refrigerant absorbs heat from the ambient air and draws moisture onto the evaporator. The refrigerant exits the evaporator through the suction line and back to the compressor, in a vapor state, and completing the A/C cycle of heat removal. At the compressor, the refrigerant is compressed again and the cycle of heat removal is repeated.

The conditioned air is distributed through the HVAC module for passenger comfort. The heat and moisture removed from the passenger compartment will also change form, or condense, and is discharged from the HVAC module as water.

A/C Cycle with Auxiliary

The auxiliary A/C system operates from the vehicles primary A/C system. The front or primary A/C system must be ON to allow the rear A/C system to function.

Refrigerant is the key element in an air conditioning system. R-134a is presently the only EPA approved refrigerant for automotive use. R-134a is an very low temperature gas that can transfer the undesirable heat and moisture from the passenger compartment to the outside air.

The A/C system used on this vehicle is a non cycling system. Non cycling A/C systems use a high pressure switch to protect the A/C system from excessive pressure. The high pressure switch will OPEN the electrical signal, to the compressor clutch, in the event that the refrigerant pressure becomes excessive. After the high and low side of the A/C system pressure equalize, the high pressure switch will CLOSE. Closing the high pressure switch will complete the electrical circuit to the compressor clutch. The A/C system is also mechanically protected with the use of a high pressure relief valve. If the high pressure switch were to fail or if the refrigerant system becomes restricted and refrigerant pressure continued to rise, the high pressure relief will pop open and release refrigerant from the system.

The A/C compressor is belt driven and operates when the magnetic clutch is engaged. The compressor builds pressure on the vapor refrigerant. Compressing the refrigerant also adds heat to the refrigerant. The refrigerant is discharged from the compressor, through the discharge hose, and forced to flow to the condenser and then through the balance of the A/C system.

Compressed refrigerant enters the condenser in a high temperature, high pressure vapor state. As the refrigerant flows through the condenser, the heat of the refrigerant is transferred to the ambient air passing through the condenser. Cooling the refrigerant causes the refrigerant to condense and change from a vapor to a liquid state.

The condenser is located in front of the radiator for maximum heat transfer. The condenser is made of aluminum tubing and aluminum cooling fins, which allows rapid heat transfer for the refrigerant. The semi-cooled liquid refrigerant exits the condenser and flows through the liquid line. The liquid line flow is split and the liquid refrigerant flows to both the front or primary A/C system, and to the liquid line for the rear A/C system.

The liquid refrigerant, flowing to the rear A/C system, flows into the rear TXV. The rear TXV is located at the rear evaporator inlet. The TXV is the dividing point for the high and the low pressure sides of the rear A/C system. As the refrigerant passes through the TXV, the pressure on the refrigerant is lowered. Due to the pressure differential on the liquid refrigerant, the refrigerant will begin to boil at the expansion device. The TXV also meters the amount of liquid refrigerant that can flow into the evaporator.

Refrigerant exiting the TXV flows into the evaporator core in a low pressure, liquid state. Ambient air is drawn through the rear A/C module and passes through the evaporator core. Warm and moist air will cause the liquid refrigerant boil inside of the evaporator core. The boiling refrigerant absorbs heat from the ambient air and draws moisture onto the evaporator. The refrigerant exits the evaporator through the suction line and back to the primary A/C systems suction line. Refrigerant in the primary A/C system suction line flows back to the compressor, in a vapor state, and completes the A/C cycle of heat removal. At the compressor, the refrigerant is compressed again and the cycle of heat removal is repeated.

The conditioned air is distributed through the rear A/C module for passenger comfort. The heat and moisture removed from the rear passenger compartment will also change form, or condense, and is discharged from the rear A/C module as water.

Section 6

Power and Signal Distribution

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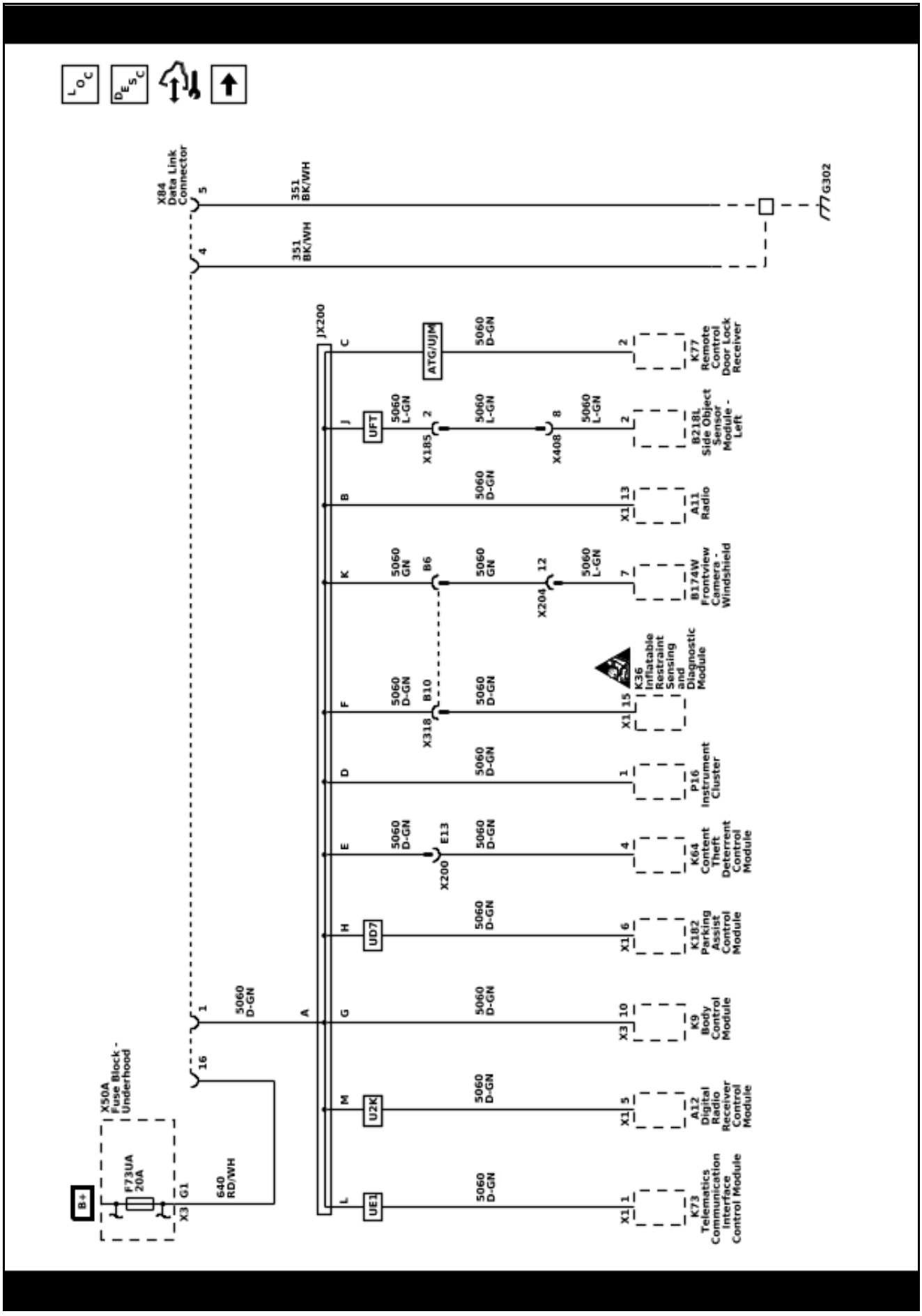
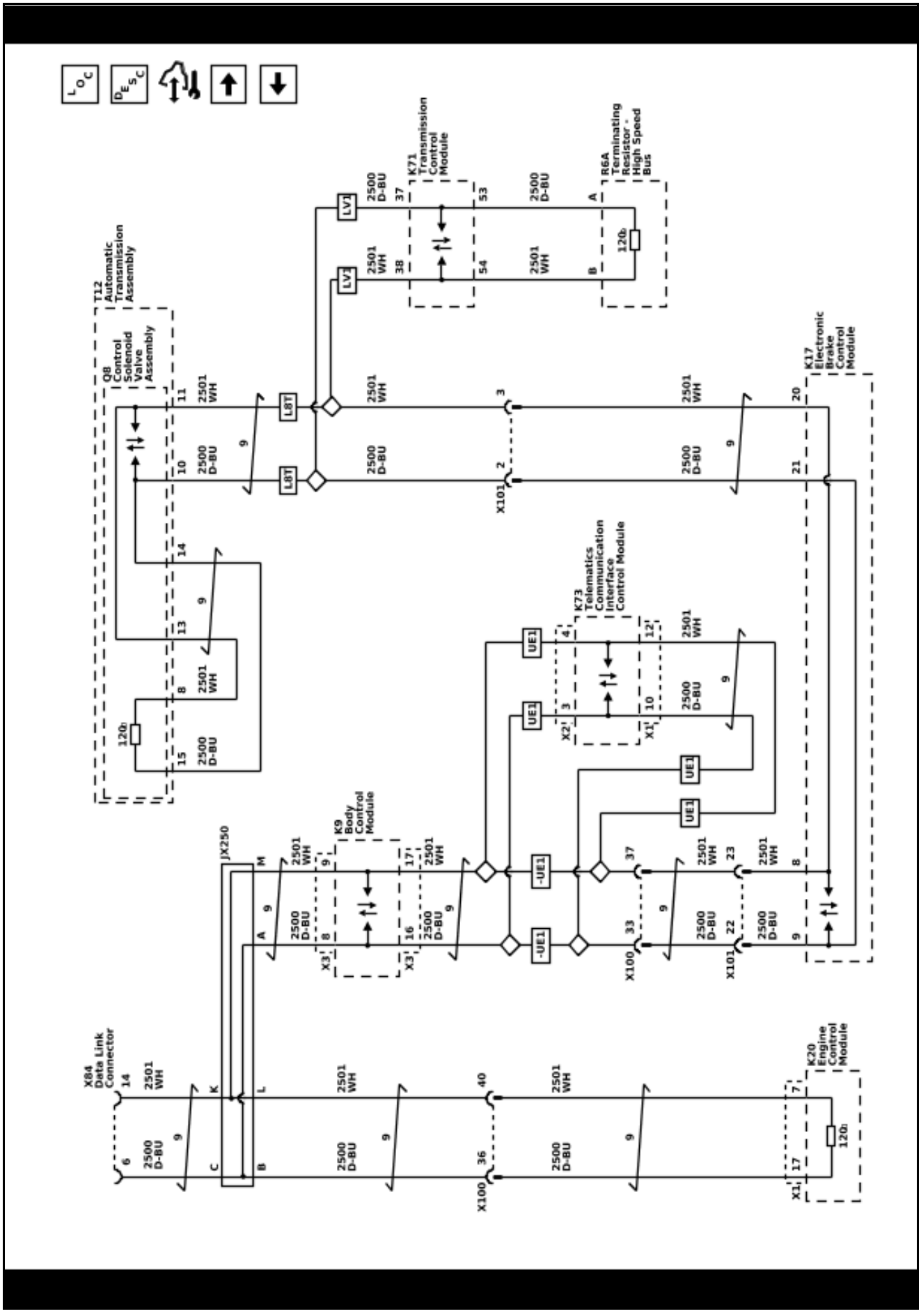
Data Communications

Schematic and Routing Diagrams

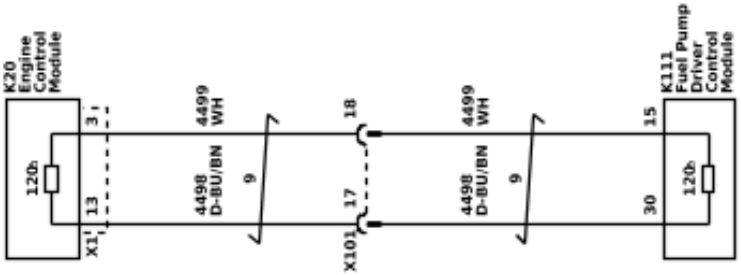
Data Communication Schematics (Low Speed GMLAN)



Data Communication Schematics (High Speed GMLAN)

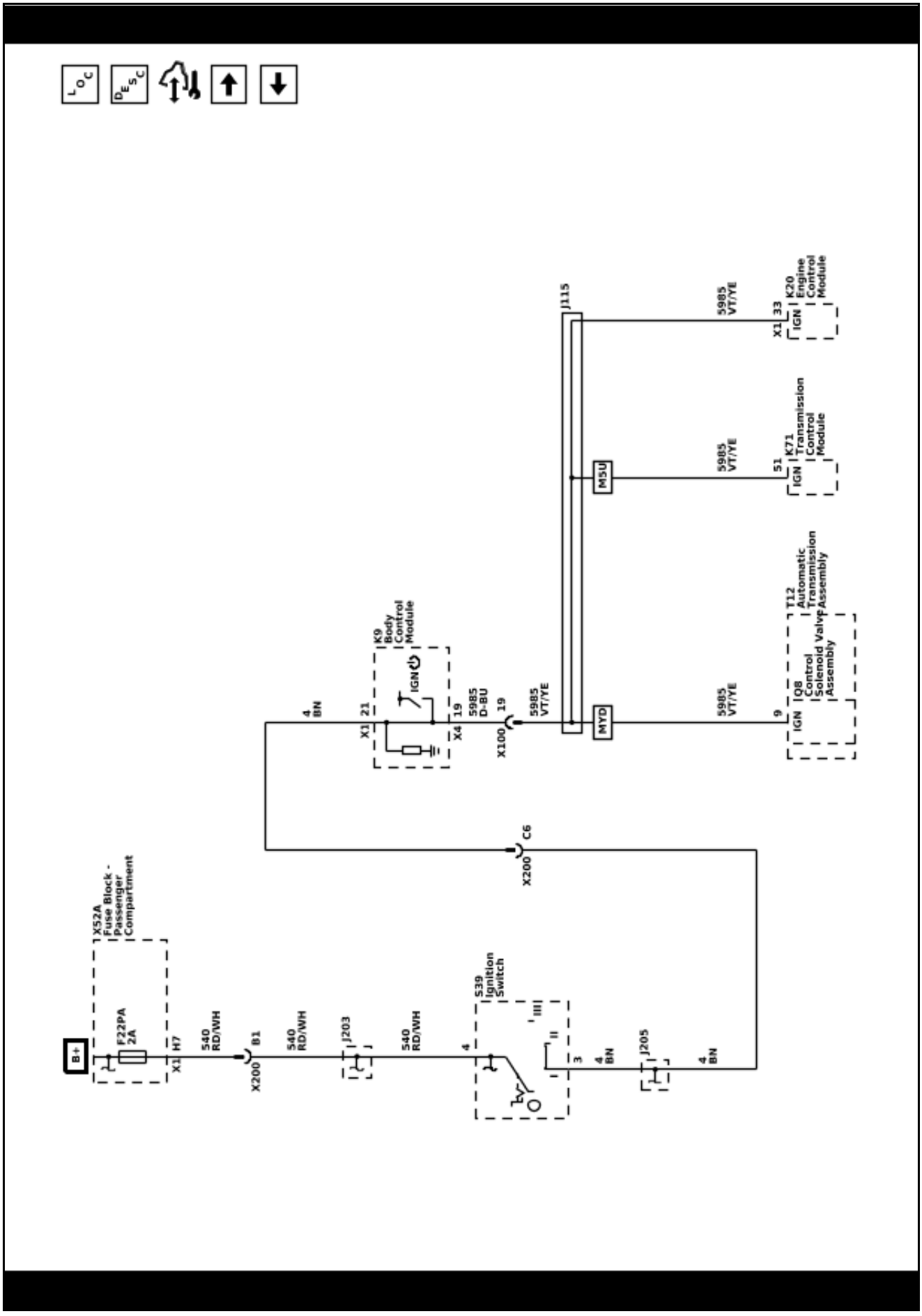


LOC
DESC

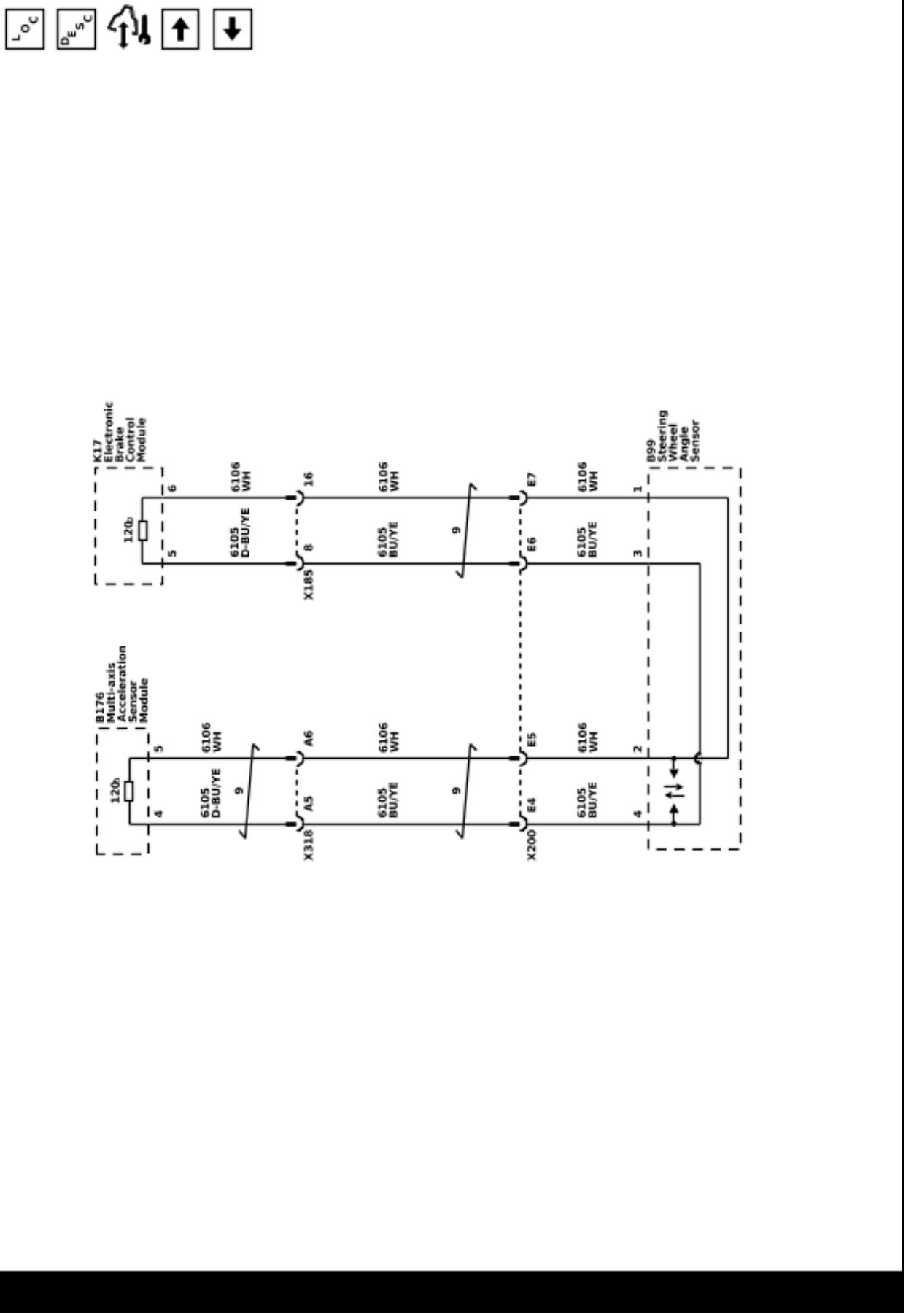

K20
Engine
Control
Module
120Ω
3
13
X1
4499
WH
4498
D-BU/BN
9
18
17
X101
4499
WH
4498
D-BU/BN
9
15
30
K111
Fuel Pump
Driver
Control
Module
120Ω

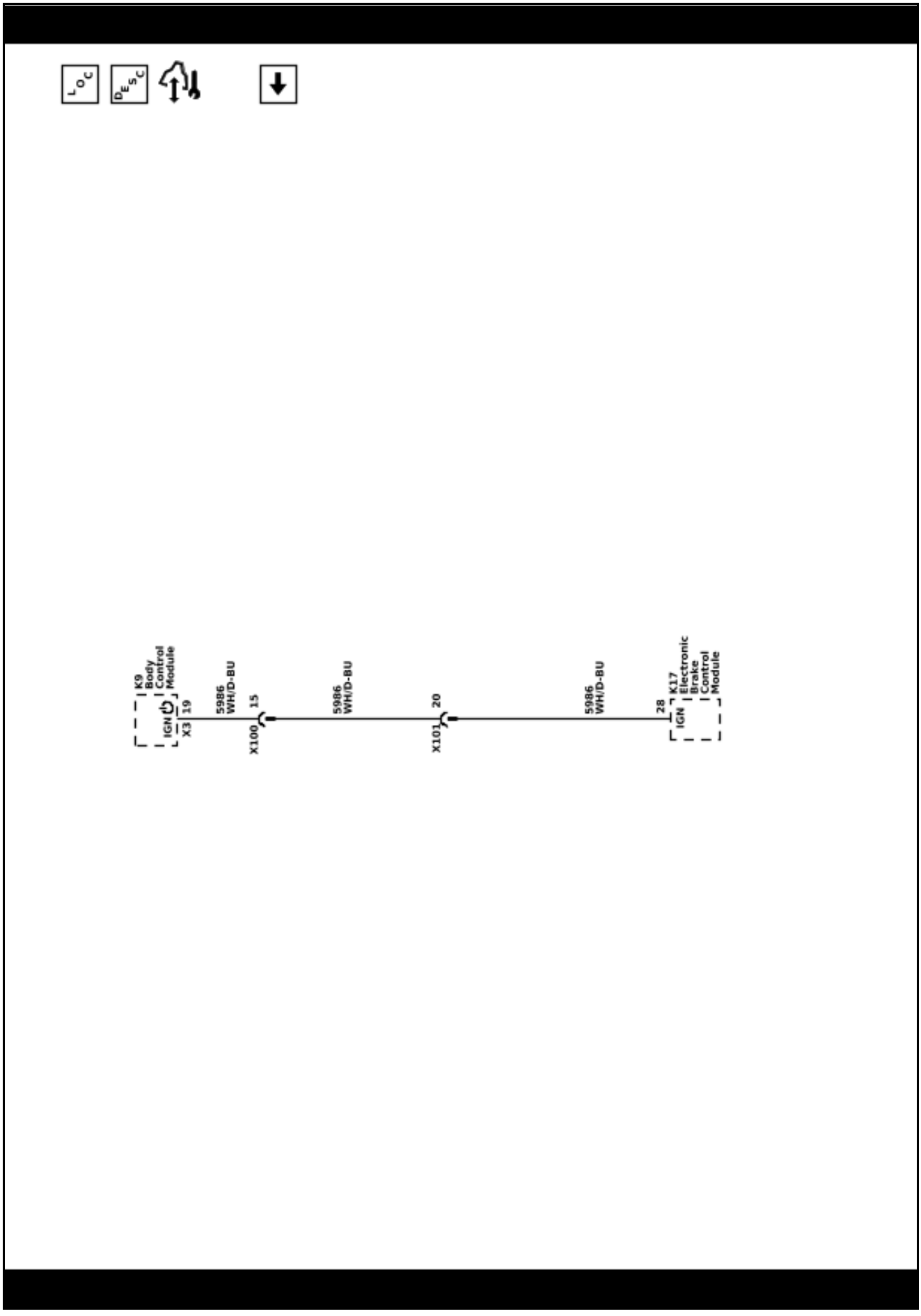
6019650

Data Communication Schematics (Accessory Wakeup)

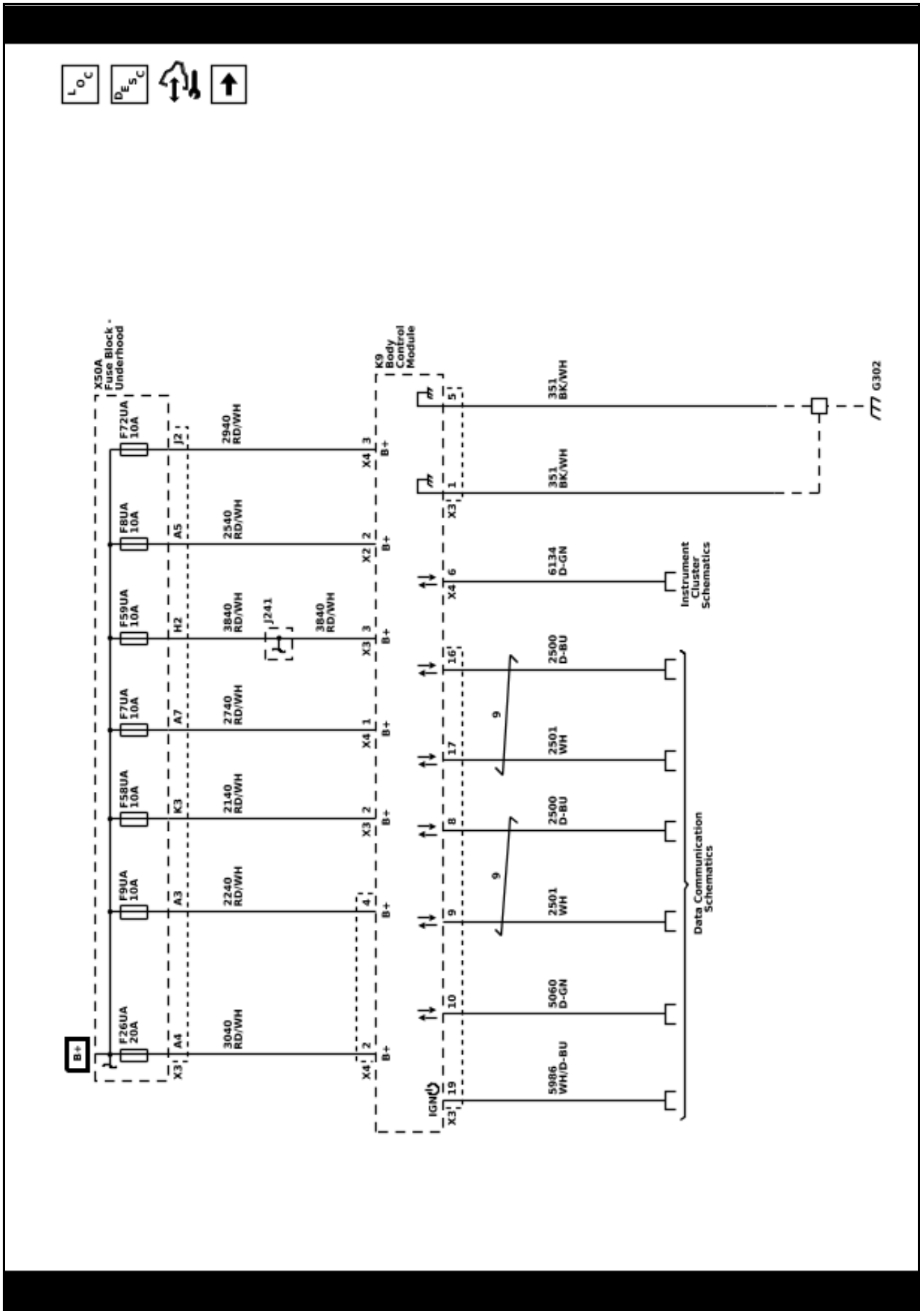


Data Communication Schematics (Chassis High Speed GMLAN)

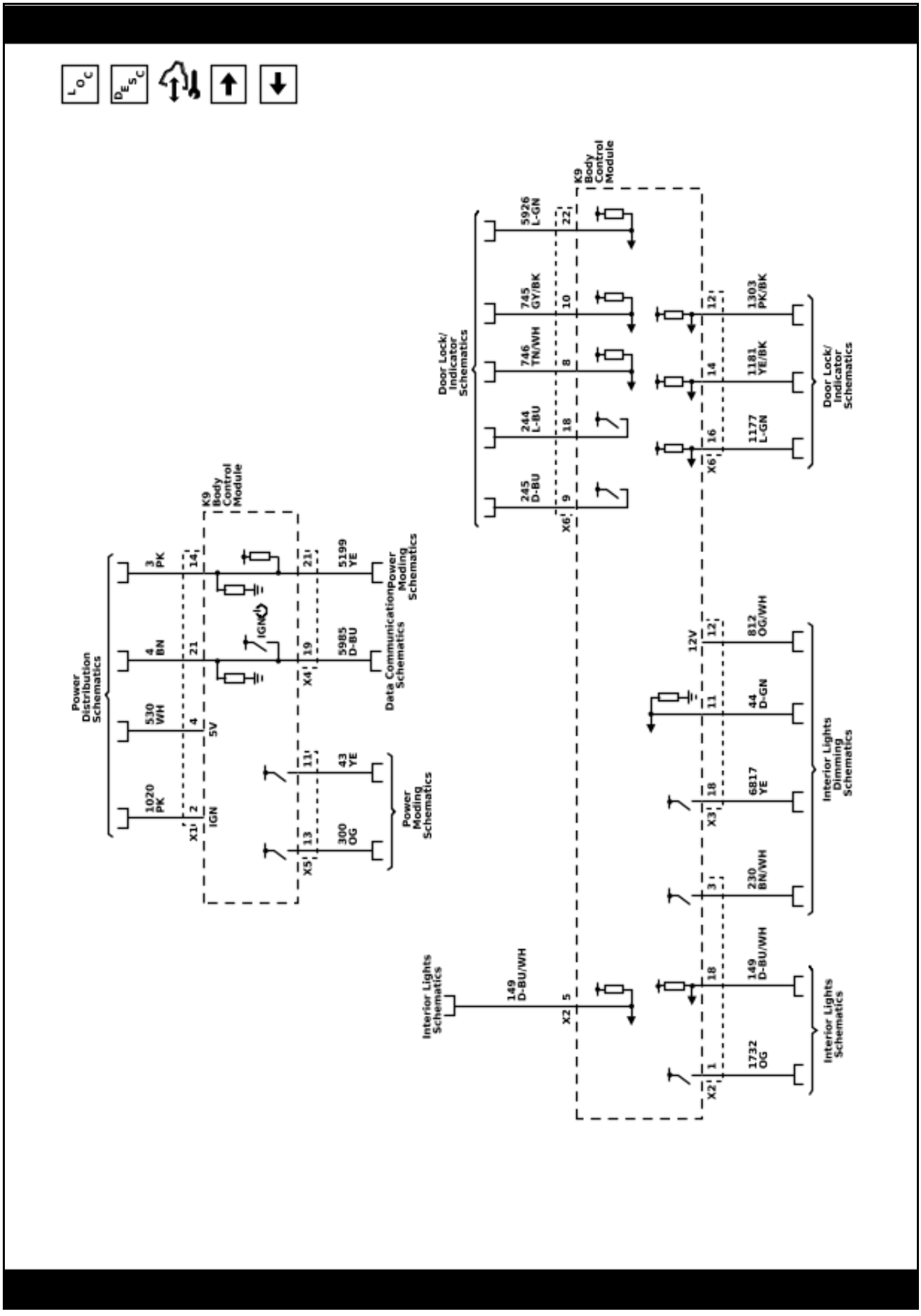



6019653
K9
Body
Control
Module
IGN
X3
19
5986
WH/D-BU
15
X100
5986
WH/D-BU
20
X101
5986
WH/D-BU
28
K17
Electronic
Brake
Control
Module
IGN

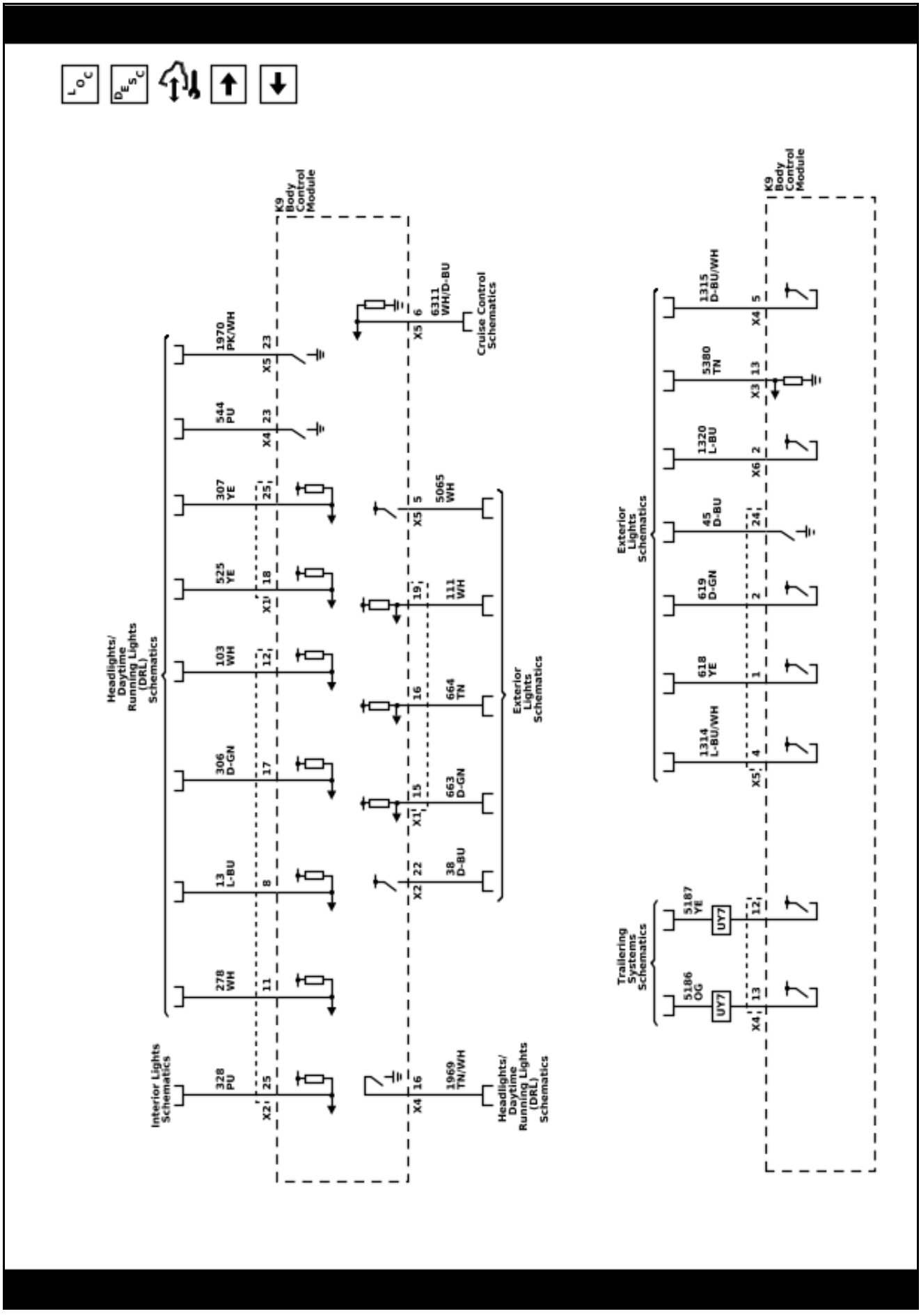
Body Control System Schematics (BCM Power, Ground and Serial Data)



Body Control System Schematics (BCM Inputs and Outputs (1 of 3))



Body Control System Schematics (BCM Inputs and Outputs (2 of 3))



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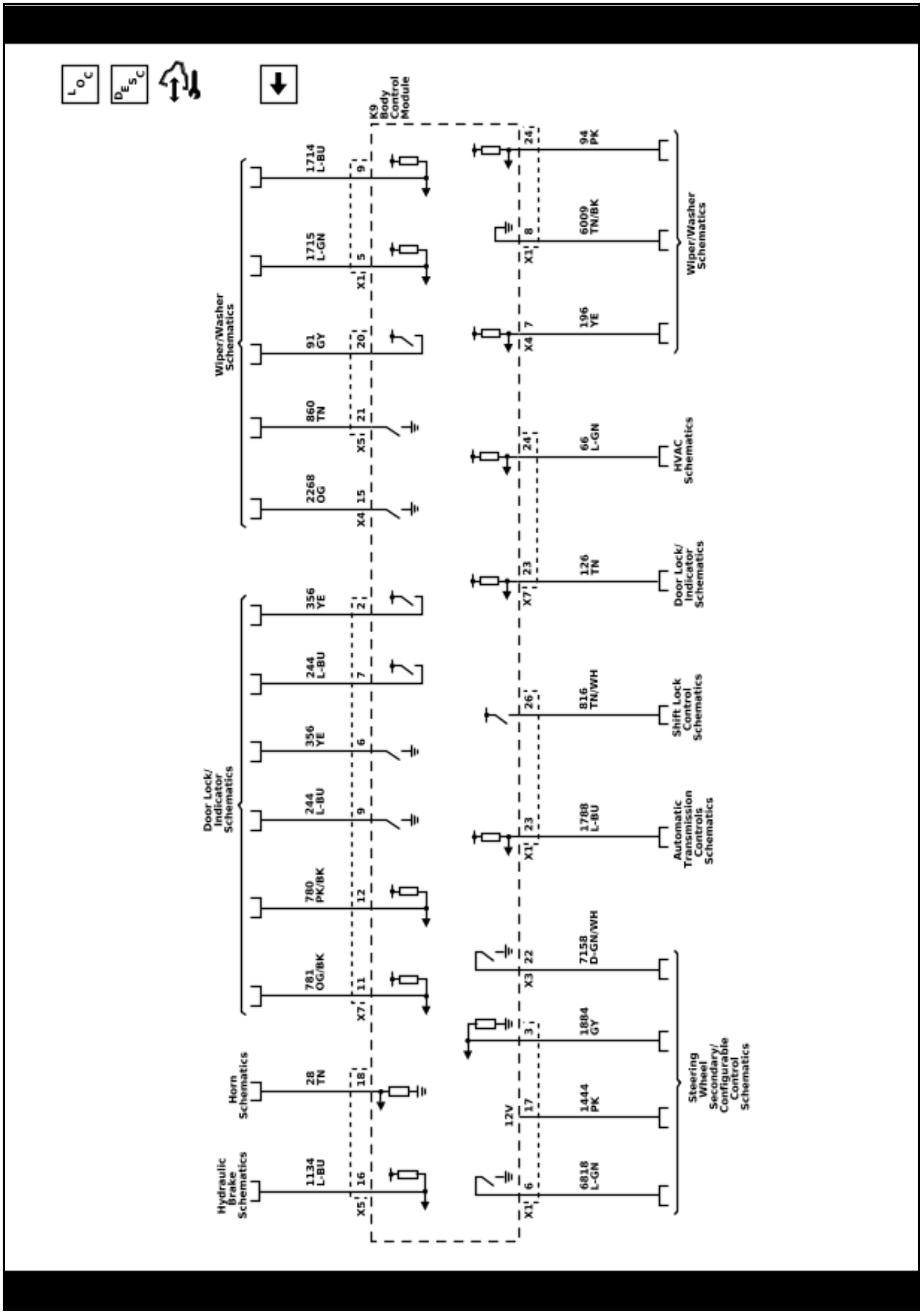
Body Control System Schematics (BCM Inputs and Outputs (3 of 3))



Description and Operation

Body Control System Description and Operation

The body control system consists of the body control module (BCM), communications, and various input and outputs. Some inputs, outputs and messages require other modules to interact with the BCM. The BCM also has discrete input and output terminals to control the vehicle's body functions. The BCM is wired to the GMLAN High speed serial data bus and the GMLAN Low speed serial data bus and acts as a gateway between them. If the BCM does not communicate the vehicle will not start due to the inability of the Engine/ Powertrain Control Module (ECM/PCM) and Vehicle Theft Deterrent (VTD) Control Module to communicate without the BCM providing the gateway function.

Power Mode Master

This vehicles BCM functions as the power mode master (PMM). The ignition switch is a low current switch with multiple discrete ignition switch signals to the PMM for determination the power mode that will be sent over the serial data circuits to the other modules that need this information, and so the PMM will activate relays and other direct outputs of the PMM as needed. Refer to *Power Mode Description and Operation on page 6-594* for a complete description of power mode functions.

Serial Data Gateway

The BCM in this vehicle functions as a gateway or translator. The purpose of the gateway is to translate serial data messages between the GMLAN high speed bus and the GMLAN low speed bus for communication between the various modules. The gateway will interact with each network according to that network's transmission protocol.

One example of this necessary communication is the communication between the Engine/Powertrain Control Module (ECM/PCM) which is high speed serial data and Vehicle Theft Deterrent (VTD) Control Module which is low speed serial data. If these modules can not exchange information, the vehicle will not start.

Communication between the BCM and a scan tool can be on the high speed GMLAN network or low speed GMLAN network. If one network is lost, the BCM can still communicate with the scan tool. A lost communication DTC typically is set in modules other than the module with a communication failure.

Body Control Module

The various body control module (BCM) input and output circuits are described in the corresponding functional areas indicated on the BCM electrical schematics. Some BCM functions with the subsystems may be as a gateway only or as an enable for the system. The BCM related systems/subsystems include, but are not limited to the following:

- Antilock brake system (ABS)
- Cruise control system
- Exterior lighting—Refer to *Exterior Lighting Systems Description and Operation*.
- Horn system —Refer to *Horns System Description and Operation on page 2-10*.
- Instrument cluster indicator control
- Interior lighting—Refer to *Interior Lighting Systems Description and Operation*.
- Power door lock system —Refer to *Power Door Locks Description and Operation on page 2-26*.
- Rear window defogger system —Refer to *Rear Window Defogger Description and Operation on page 2-6*.
- Remote function actuation (RFA) control—Refer to *Keyless Entry System Description and Operation on page 7-13*.
- Retained accessory power (RAP)—Refer to *Retained Accessory Power Description and Operation on page 6-595*.
- Shift lock control system —Refer to *Automatic Transmission Shift Lock Control Description and Operation on page 8-5*.
- Starting system—Refer to *Starting System Description and Operation on page 4-15*.
- Supplemental inflatable restraint (SIR) system — Refer to *Supplemental Inflatable Restraint System Description and Operation on page 7-24*.
- Theft deterrent—Refer to *Immobilizer Description and Operation on page 7-5*.
- Wiper/Washer system functions

Data Link Communications Description and Operation

Circuit Description

The communication among control modules is performed primarily through the GMLAN high speed serial data circuit and the GMLAN low speed serial data circuits. The modules that need real time communication are attached to the high speed GMLAN network. The body control module (BCM) is the serial data gateway between the networks. The purpose of the gateway is to translate serial data messages between the GMLAN high speed bus and the GMLAN low speed bus. The Local Interconnect Network (LIN) is another serial data communication network used on this vehicle which is dedicated to the remote compass module (RCM) subsystem. Below are more detailed descriptions of the individual networks. The gateway will interact with each network according to that network's transmission protocol. Refer to *Body Control System Description and Operation on page 6-14* for more information about the gateway.

GMLAN High Speed Circuit Description

The data link connector (DLC) allows a scan tool to communicate with the high speed GMLAN serial data circuit. The serial data is transmitted on two twisted wires that allow speed up to 500 Kb/s. The twisted pair is terminated with two 120 ohms resistors. The resistors are used to reduce noise on the High Speed GMLAN bus during normal vehicle operation. The high speed GMLAN is a differential bus. The high speed GMLAN serial data (+) and high speed GMLAN serial data (−) are driven to opposite extremes from a rest or idle level. The idle level, which is approximately 2.5 volts, is considered recessive transmitted data and is interpreted as a logic 1. Driving the lines to their extremes, adds one volt to the high speed GMLAN

serial data (+) and subtracts one volt from the high speed GMLAN serial data (−) wire. This dominant state is interpreted as a logic 0. GMLAN network management supports selective start up and is based on virtual networks. A virtual network is a collection of signals started in response to a vehicle event. The starting of a virtual network signifies that a particular aspect of the vehicles functionality has been requested. A virtual network is supported by virtual devices, which represents a collection of signals owned by a single physical device. So, any physical device can have one or more virtual devices. The signal supervision is the process of determining whether an expected signal is being received or not. Failsofting is the ability to substitute a signal with a default value or a default algorithm, in the absence of a valid signal. Some messages are also interpreted as a heartbeat of a virtual device. If such a signal is lost, the application will set a no communication code against the respective virtual device. This code is displayed on the Tech 2 screen as a code against the physical device. Note: a loss of serial data DTC does not represent a failure of the module that the code is set in.

GMLAN Low Speed Circuit Description

The data link connector (DLC) allows a scan tool to communicate with the low speed GMLAN serial data circuit. The serial data is transmitted over a single wire to the appropriate control modules. The transmission speed for GMLAN low speed is up to 83.33 Kb/s. Under normal vehicle operating conditions, the speed of the bus is 33.33 Kb/s. This protocol produces a simple pulse train sent out over the GMLAN low speed serial data bus. When a module pulls the bus high, 5 volts, this creates a dominant logic state or 0 on the bus. When the bus is pulled low, 0 volts, it is translated as a recessive logic state or 1. To wake the control modules connected to the GMLAN low speed serial data bus, a high voltage wake up pulse is sent out over the bus, the voltage level of the pules is +10 volts. Modules connected to the GMLAN low speed bus can be part of a virtual network as described in the previous paragraph. Most modules on the GMLAN low speed serial data bus are connected to the bus in a parallel configuration. Refer to the schematics to determine modules that are not in parallel

Local Interconnect Network (LIN) Description

The remote compass module (RCM) communicates with the BCM utilizing a single wire LIN communication link. The BCM is the gateway for the GMLAN network. All data is communicated on the LIN bus, therefore there are only 3 circuits to the RCM as follows:

- Ground
- LIN bus
- Voltage

Data Link Connector (DLC)

The data link connector (DLC) is a standardized 16-cavity connector. Connector design and location is dictated by an industry wide standard, and provides the following:

- Pin 1 GMLAN low speed communications terminal
- Pin 4 Scan tool power ground terminal
- Pin 5 Common signal ground terminal
- Pin 6 High speed GMLAN serial data bus (+) terminal
- Pin 14 High speed GMLAN serial data bus (−) terminal
- Pin 16 Scan tool power, battery positive voltage terminal

Serial Data Reference

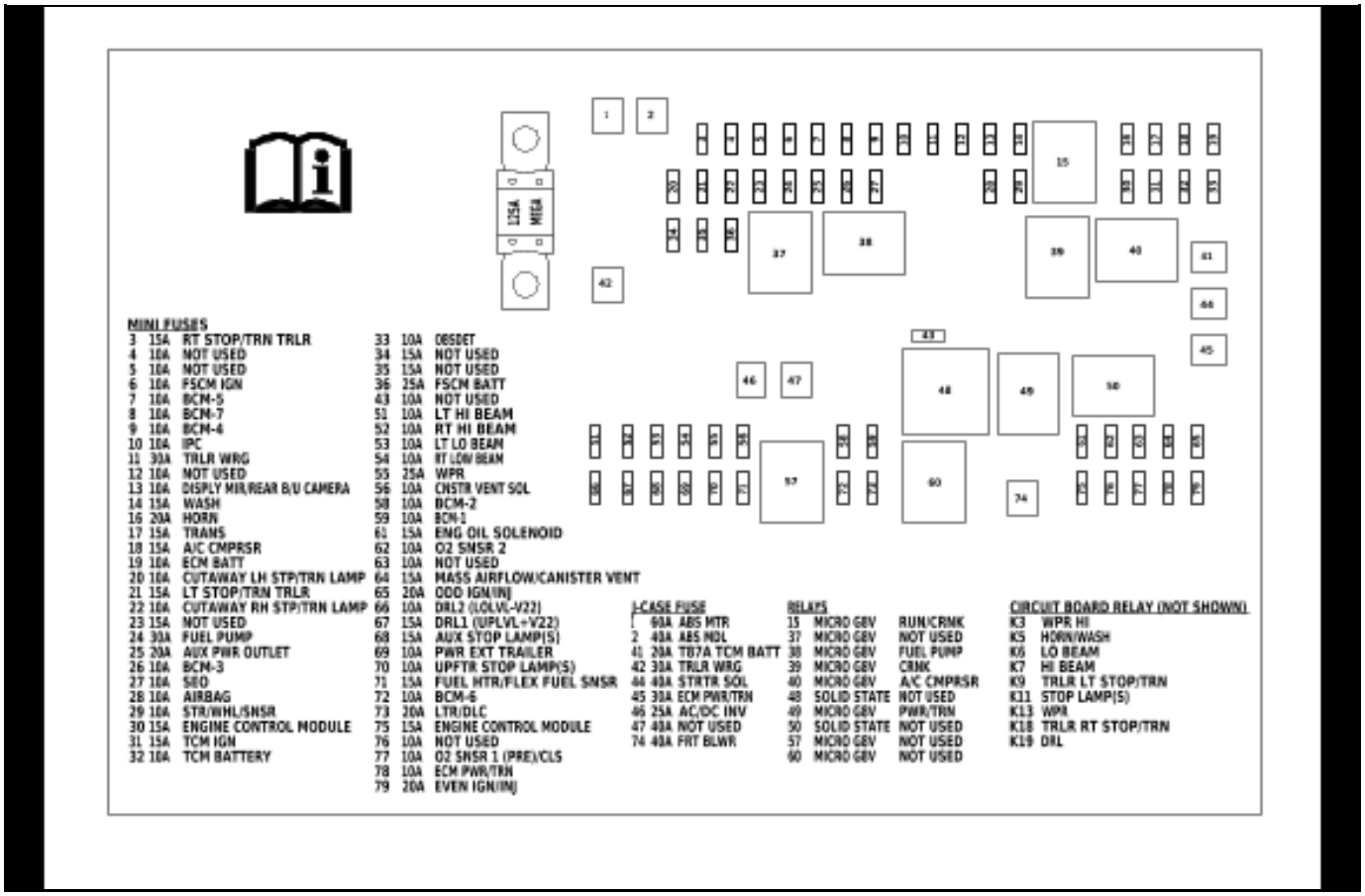
The scan tool communicates over the various busses on the vehicle. When a scan tool is installed on a vehicle, the scan tool will try to communicate with every module that could be optioned into the vehicle. If an option is not installed on the vehicle, the scan tool will display No Comm for that options specific control module. In order to avert misdiagnoses of No Communication with a specific module, refer to Data Link References for a list of modules, the bus they communicate with, and the RPO codes for a specific module.

Electrical Component and Inline Harness Connector End Views

Component Locator

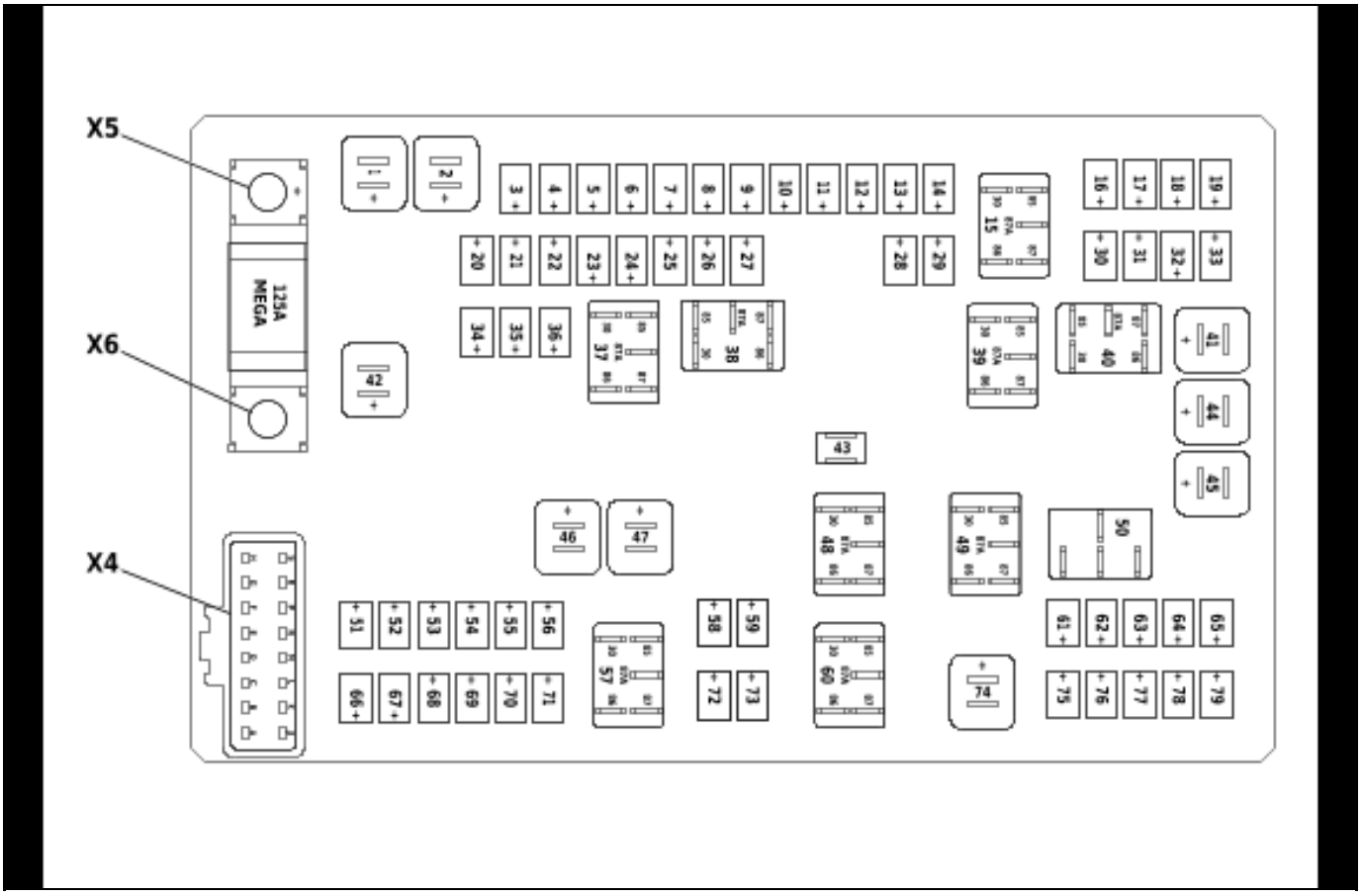
Electrical Center Identification Views

X50A Fuse Block - Underhood Label


MINI FUSES
3 15A RT STOP/TRN TRLR
4 10A NOT USED
5 10A NOT USED
6 10A FSCM IGN
7 10A BCM-5
8 10A BCM-7
9 10A BCM-4
10 10A IPC
11 30A TRLR WRG
12 10A NOT USED
13 10A DISPLY MIR/REAR B/U CAMERA
14 15A WASH
16 20A HORN
17 15A TRANS
18 15A A/C CMPRSR
19 10A ECM BATT
20 10A CUTAWAY LH STP/TRN LAMP
21 15A LT STOP/TRN TRLR
22 10A CUTAWAY RH STP/TRN LAMP
23 15A NOT USED
24 30A FUEL PUMP
25 20A AUX PWR OUTLET
26 10A BCM-3
27 10A SEO
28 10A AIRBAG
29 10A STR/WHL/SNSR
30 15A ENGINE CONTROL MODULE
31 15A TCM IGN
32 10A TCM BATTERY
33 10A OBSDET
34 15A NOT USED
35 15A NOT USED
36 25A FSCM BATT
43 10A NOT USED
51 10A LT HI BEAM
52 10A RT HI BEAM
53 10A LT LO BEAM
54 10A RT LOW BEAM
55 25A WPR
56 10A CNSTR VENT SOL
58 10A BCM-2
59 10A BCM-1
61 15A ENG OIL SOLENOID
62 10A O2 SNSR 2
63 10A NOT USED
64 15A MASS AIRFLOW/CANISTER VENT
65 20A ODD IGN/INJ
66 10A DRL2 (LOLVL-V22)
67 15A DRL1 (UPLVL+V22)
68 15A AUX STOP LAMP(S)
69 10A PWR EXT TRAILER
70 10A UPFTR STOP LAMP(S)
71 15A FUEL HTR/FLEX FUEL SNSR
72 10A BCM-6
73 20A LTR/DLC
75 15A ENGINE CONTROL MODULE
76 10A NOT USED
77 10A O2 SNSR 1 (PRE)/CLS
78 10A ECM PWR/TRN
79 20A EVEN IGN/INJ
J-CASE FUSE
1 60A ABS MTR
2 40A ABS MDL
41 20A T87A TCM BATT
42 30A TRLR WRG
44 40A STRTR SOL
45 30A ECM PWR/TRN
46 25A AC/DC INV
47 40A NOT USED
74 40A FRT BLWR
RELAYS
15 MICRO 68V RUN/CRNK
37 MICRO 68V NOT USED
38 MICRO 68V FUEL PUMP
39 MICRO 68V CRNK
40 MICRO 68V A/C CMPRSR
48 SOLID STATE NOT USED
49 MICRO 68V PWR/TRN
50 SOLID STATE NOT USED
57 MICRO 68V NOT USED
60 MICRO 68V NOT USED
CIRCUIT BOARD RELAY (NOT SHOWN)
K3 WPR HI
K5 HORN/WASH
K6 LO BEAM
K7 HI BEAM
K9 TRLR LT STOP/TRN
K11 STOP LAMP(S)
K13 WPR
K18 TRLR RT STOP/TRN
K19 DRL

5702954

X50A Fuse Block - Underhood Top View



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Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Mega Fuses				
MEGA	—	MEGA	125A	• X52A Fuse Block - Passenger Compartment
Mini Fuses				
3	RT STOP/TRN TRLR	F3UA	15A	• X88 Trailer Connector
4	NOT USED	F4UA	10A	• Not Used
5	NOT USED	F5UA	10A	• Not Used
6	FSCM IGN	F6UA	10A	• K111 Fuel Pump Driver Control Module
7	BCM-5	F7UA	10A	• K9 Body Control Module
8	BCM-7	F8UA	10A	• K9 Body Control Module
9	BCM-4	F9UA	10A	• K9 Body Control Module
10	IPC	F10UA	10A	• P16 Instrument Cluster
11	TRLR WRG	F11UA	30A	• W8 Blunt Cut - Trailer Provision (UY7)
12	NOT USED	F12UA	10A	• Not Used
13	DISPLY MIR/ REAR B/U CAM-ERA	F13UA	10A	• A10 Inside Rearview Mirror (UVC) • B87 Rearview Camera (UVC)
14	WASH	F14UA	15A	• G24 Windshield Washer Pump
16	HORN	F16UA	20A	• P13 Horn Assembly
17	TRANS	F17UA	15A	• Not Used

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
18	A/C CMPRSR	F18UA	15A	• Q2 A/C Compressor Clutch (C60)
19	ECM BATT	F19UA	10A	• K20 Engine Control Module
20	CUTAWAY LH STP/TRN LAMP	F20UA	10A	• X405
21	LT STOP/TRN TRLR	F21UA	15A	• X88 Trailer Connector
22	CUTAWAY RH STP/TRN LAMP	F22UA	10A	• X405
23	NOT USED	F23UA	20A	• Not Used
24	FUEL PUMP	F24UA	20A	• Not Used
25	AUX PWR OUT-LET	F25UA	20A	• X80B Accessory Power Receptacle - Center Console 2
26	BCM-3	F26UA	10A	• K9 Body Control Module
27	SEO	F27UA	10A	• Not Used
28	AIRBAG	F28UA	10A	• K36 Inflatable Restraint Sensing and Diagnostic Module • S40 Passenger Air Bag Disable Switch (C99)
29	STR/WHL/SNSR	F29UA	10A	• Not Used
30	ENGINE CON-TROL MODULE	F30UA	15A	• K20 Engine Control Module
31	TCM IGN	F31UA	15A	• K71 Transmission Control Module (M5U) • T12 Automatic Transmission Assembly (MYD)
32	TCM BATTERY	F32UA	10A	• T12 Automatic Transmission Assembly
33	OBSDET	F33UA	10A	• B218L Side Object Sensor Module - Left (UFT) • B218R Side Object Sensor Module - Right (UFT) • K182 Parking Assist Control Module (UD7)
34	NOT USED	F34UA	15A	• Not Used
35	NOT USED	F35UA	15A	• Not Used
36	FSCM BATT	F36UA	25A	• K111 Fuel Pump Driver Control Module
43	NOT USED	F43UA	10A	• Not Used
51	LT HI BEAM	F51UA	10A	• E4E Headlamp - Left High Beam
52	RT HI BEAM	F52UA	10A	• E4F Headlamp - Right High Beam
53	LT LO BEAM	F53UA	10A	• E4G Headlamp - Left Low Beam
54	RT LO BEAM	F54UA	10A	• E4H Headlamp - Right Low Beam
55	WPR	F55UA	25A	• KR12B Windshield Wiper Relay
56	CNSTR VENT SOL	F56UA	10A	• Q13 Evaporative Emission Vent Solenoid Valve
58	BCM-2	F58UA	10A	• K9 Body Control Module
59	BCM-1	F59UA	10A	• K9 Body Control Module
61	ENG OIL SOLE-NOID	F61UA	15A	• Q44 Engine Oil Pressure Control Solenoid Valve (L8T)
62	O2 SNSR 2	F62UA	10A	• B52D Heated Oxygen Sensor - Bank 1 Sensor 2 • B52F Heated Oxygen Sensor - Bank 2 Sensor 2
63	NOT USED	F63UA	10A	• Not Used
64	MASS AIRFLOW/ CANISTER VENT	F64UA	15A	• B75C Multifunction Intake Air Sensor • Q12 Evaporative Emission Purge Solenoid Valve

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
65	ODD IGN/INJ	F65UA	20A	• K20 Engine Control Module • T8A Ignition Coil 1 • T8C Ignition Coil 3 • T8E Ignition Coil 5 • T8G Ignition Coil 7 (L8T)
66	DRL2 (LOLVL-V22)	F66UA	10A	• Not Used
67	DRL1 (UPLVL +V22)	F67UA	15A	• E4G Headlamp - Left Low Beam
68	AUX STOP LAMP(S)	F68UA	15A	• X405 (Cutaway)
69	PWR EXT TRAILER	F69UA	10A	• W8 Blunt Cut - Trailer Provision (UY7)
70	UPFTR STOP LAMP(S)	F70UA	10A	• W25 Blunt Cut - Configurable Provision
71	FUEL HTR/FLEX FUEL SNSR	F71UA	15A	• Not Used
72	BCM-6	F72UA	10A	• K9 Body Control Module
73	LTR/DLC	F73UA	20A	• X80A Accessory Power Receptacle - Center Console 1 • X84 Data Link Connector
75	ENGINE CON-TROL MODULE	F75UA	15A	• K20 Engine Control Module
76	NOT USED	F76UA	10A	• Not Used
77	O2 SNSR 1 (PRE)/ CLS	F77UA	10A	• B52C Heated Oxygen Sensor - Bank 1 Sensor 1 • B52E Heated Oxygen Sensor - Bank 2 Sensor 1
78	ECM PWR/TRN	F78UA	10A	• Not Used
79	EVEN IGN/INJ	F79UA	20A	• K20 Engine Control Module • T8B Ignition Coil 2 • T8D Ignition Coil 4 • T8F Ignition Coil 6 • T8H Ignition Coil 8 (L8T)
J-Case Fuses				
1	ABS MTR	F1UA	60A	• K17 Electronic Brake Control Module
2	ABS MDL	F2UA	40A	• K17 Electronic Brake Control Module
41	T87A TCM BATT	F41UA	20A	• K71 Transmission Control Module (M5U)
42	TRLR WRG	F42UA	30A	• X88 Trailer Connector (UY7)
44	STRTR SOL	F44UA	40A	• M64 Starter Motor
45	ECM PWR/TRN	F45UA	30A	• K20 Engine Control Module
46	AC/DC INV	F46UA	25A	• T1 Accessory DC/AC Power Inverter Module (KI4)
47	FAN LO	F47UA	40A	• Not Used
74	FRT BLWR	F74UA	40A	• R3 Blower Motor Resistor

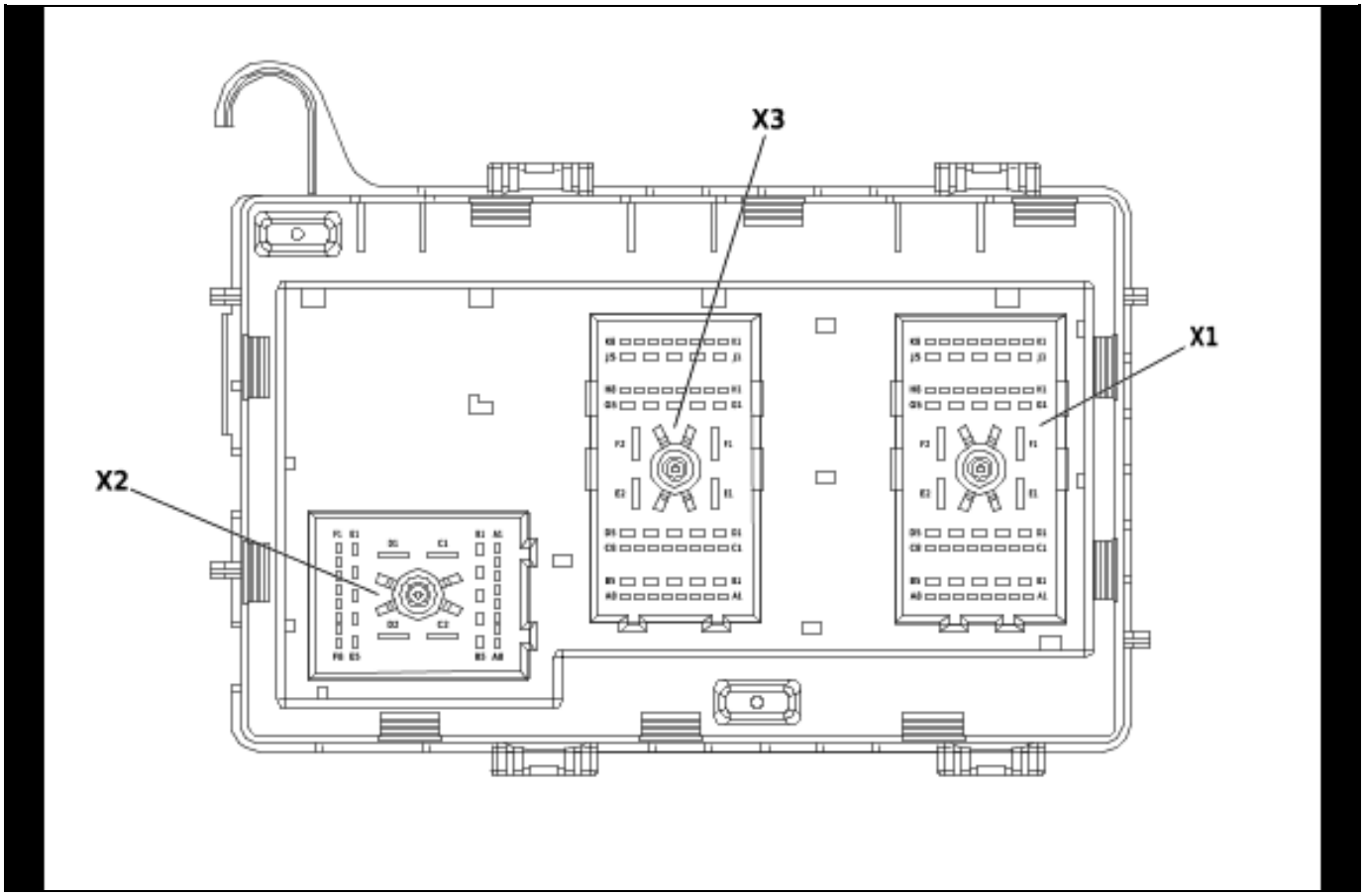
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
Relays				
15	RUN/CRNK	KR93 Ignition Run/ Crank Relay	—	• F6UA • F10UA • F12UA • F13UA • F17UA • F28UA • F29UA • F30UA • F31UA
37	NOT USED	KR150 Relay - Spare	—	• F23UA
38	FUEL PUMP	KR23A Fuel Pump Relay	—	• F24UA
39	CRNK	KR27 Starter Relay	—	• F44UA
40	A/C CMPRSR	KR29 A/C Compressor Clutch Relay	—	• F18UA
48	NOT USED	KR150 Relay - Spare	—	• Not Used
49	PWR/TRN	KR75 Engine Controls Ignition Relay	—	• F45UA • F61UA • F62UA • F63UA • F64UA • F65UA • F71UA • F75UA • F76UA • F77UA • F78UA • F79UA
50	NOT USED	KR150 Relay - Spare	—	• Not Used
57	NOT USED	KR150 Relay - Spare	—	• Not Used
60	NOT USED	KR150 Relay - Spare	—	• Not Used
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
K3	WPR HI	KR12C Windshield Wiper Speed Control Relay	—	• M75 Windshield Wiper Motor
K5	HORN/WASH	KR3 Horn Relay, KR11 Windshield Washer Pump Relay	—	• F14UA • F16UA
K6	LO BEAM	KR49 Headlamp Low Beam Relay	—	• F53UA • F54UA
K7	HI BEAM	KR48 Headlamp High Beam Relay	—	• F51UA • F52UA
K9	TRLR LT STOP/ TRN	KR63L Trailer Stop/Turn Signal Lamp Relay - Left	—	• F5UA • F20UA • F21UA

Usage Table (cont'd)

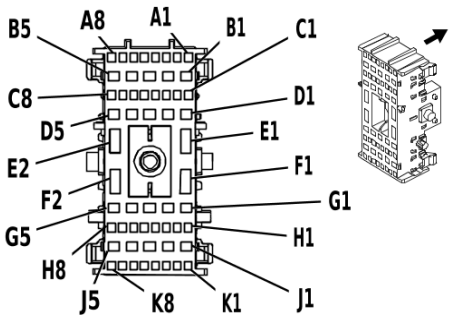
No.	Device Label Name	Device Assigned Name	Rating	Description
K11	STOP LAMP(S)	KR59 Stop Lamp Relay	—	• F68UA • F69UA • F70UA
K13	WPR	KR12B Windshield Wiper Relay	—	• KR12C Windshield Wiper Speed Control Relay
K18	TRLR RT STOP/ TRN	KR63R Trailer Stop/Turn Signal Lamp Relay - Right	—	• F3UA • F4UA • F22UA
K19	DRL	KR42 Daytime Running Lamps Relay	—	• F66UA • F67UA

X50A Fuse Block - Underhood Bottom View



2832058

X50A Fuse Block - Underhood X1



2083844

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15477823
Service Connector: 13574911
Description: 56-Way F 150, 280 GT Metri-Pack 800 Series(L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575735	J-35616-14 (GN)	J-38125-215A
II	13575753	J-35616-4A (PU)	J-38125-215A
III	19367554	J-35616-44 (YE)	J-38125-558

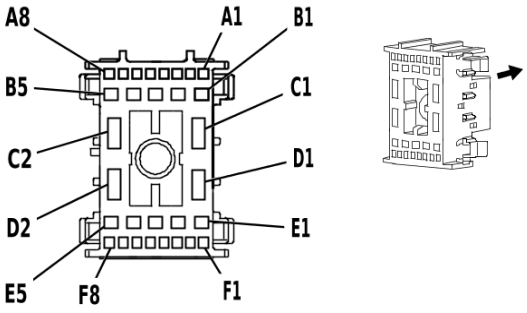
X50A Fuse Block - Underhood X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	RD / WH	140	Battery Positive Voltage	I	—
A2	0.5	RD / L-GN	1840	Battery Positive Voltage	I	—
A3 - A8	—	—	—	Not Occupied	—	—
B1	0.5	RD / D-BU	840	Battery Positive Voltage	II	—
B2	0.5	BN / L-GN	59	A/C Compressor Clutch Control	II	—
B3	—	—	—	Not Occupied	—	—
B4	1	BN / GY	29	Horn Control	II	—
B5	0.5	VT / L-GN	439	Run/Crank Ignition 1 Voltage	II	—
C1	—	—	—	Not Occupied	—	—
C2	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	I	—
C3 - C5	—	—	—	Not Occupied	—	—
C6	0.5	YE / BK	625	Starter Enable Relay Control	I	—
C7	1	BK	1250	Ground	I	—
C8	—	—	—	Not Occupied	—	—
D1	0.75	RD / L-GN	1840	Battery Positive Voltage	II	—
D2	—	—	—	Not Occupied	—	—
D3	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—

X50A Fuse Block - Underhood X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D4 - D5	—	—	—	Not Occupied	—	—
E1	4	YE	6	Starter Solenoid Crank Ignition Voltage	III	—
E2	—	—	—	Not Occupied	—	—
F1	2.5	VT / D-BU	5290	Powertrain Main Relay Fused Supply Voltage 1	III	—
F2	5	RD / PU	542	Battery Positive Voltage	III	—
G1	0.75	VT / GY	1039	Run/Crank Ignition 1 Voltage	II	—
G2	1 1	VT / D-BU VT / GY	5291 1039	Powertrain Main Relay Fused Supply Voltage 2 Run/Crank Ignition 1 Voltage	II II	L8T LV1
G3	—	—	—	Not Occupied	—	—
G4	0.75	VT / D-BU	5294	Powertrain Main Relay Fused Supply Voltage 5	II	—
G5	0.5	VT / WH	1939	Run/Crank Ignition 1 Voltage	II	—
H1 - H8	—	—	—	Not Occupied	—	—
J1	0.75	VT / BK	1239	Run/Crank Ignition 1 Voltage	II	—
J2	1 1	VT / D-BU VT / BK	5292 1239	Powertrain Main Relay Fused Supply Voltage 3 Run/Crank Ignition 1 Voltage	II II	L8T LV1
J3	—	—	—	Not Occupied	—	—
J4	0.75	VT / D-BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
J5	0.5	VT / D-BU	5293	Powertrain Main Relay Fused Supply Voltage 4	II	—
K1	0.5	VT / BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
K2 - K3	—	—	—	Not Occupied	—	—
K4	0.5	VT / BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—
K5 - K7	—	—	—	Not Occupied	—	—
K8	0.5	YE	5991	Powertrain Relay Coil Control	I	—

X50A Fuse Block - Underhood X2



1665657

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13567518
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F 150, 280 GT Metri-Pack 800 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required
III	Not required	J-35616-44 (YE)	No Tool Required
IV	Not required	J-35616-4A (PU)	No Tool Required

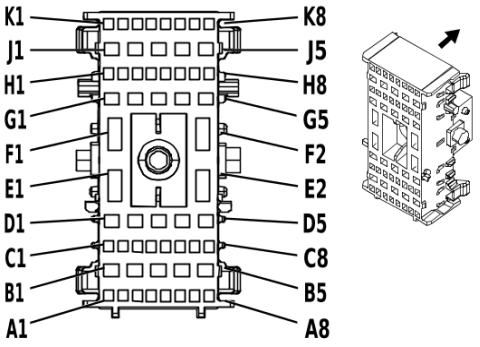
X50A Fuse Block - Underhood X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	—	—	—	Not Occupied	—	—
A2	1	YE	618	Left Rear Turn Signal Lamp Control	I	—
A3	0.8	D-BU / WH	149	Courtesy Lamp Control	I	—
A4	1	D-GN	619	Right Rear Turn Signal Lamp Control	I	—
A5 - A6	—	—	—	Not Occupied	—	—
A7	1	BN	2109	Trailer Park Lamp Control	I	—
A8	0.5	VT	2739	Run/Crank Ignition 1 Voltage	I	—
B1 - B4	—	—	—	Not Occupied	—	—
B5	1	D-GN	1619	Right Rear Trailer Stop/Turn Lamp Control	IV	—
C1	—	—	—	Not Occupied	—	—
C2	2.5	RD / VT	1640	Battery Positive Voltage	III	—
D1	3	RD / BK	742	Battery Positive Voltage	III	—
D2	5	RD / YE	442	Battery Positive Voltage	III	—
E1	—	—	—	Not Occupied	—	—
E2	0.8	L-BU	1320	Center High Mounted Stop Lamp Control 2	IV	—
E3	3	D-BU	47	Trailer Auxiliary Control	II	—
E4	1	YE	1618	Left Rear Trailer Stop/Turn Lamp Control	IV	—
E5	2.5	RD / VT	1940	Battery Positive Voltage	II	—

X50A Fuse Block - Underhood X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
F1	1	L-GN	1624	Trailer Backup Lamp Control	I	—
F2	0.5	RD / L-GN	40	Battery Positive Voltage	I	—
F3	1	BN	2109	Trailer Park Lamp Control	I	—
F4 - F6	—	—	—	Not Occupied	—	—
F7	1	D-GN	619	Right Rear Turn Signal Lamp Control	I	—
F8	1	YE	618	Left Rear Turn Signal Lamp Control	I	—

X50A Fuse Block - Underhood X3



1581655

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15477822
Service Connector: 19115189
Description: 56-Way F 150, 280 GT Metri-Pack 800 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575735	J-35616-14 (GN)	J-38125-215A
II	13575756	J-35616-4A (PU)	J-38125-215A
III	19367554	J-35616-44 (YE)	J-38125-558

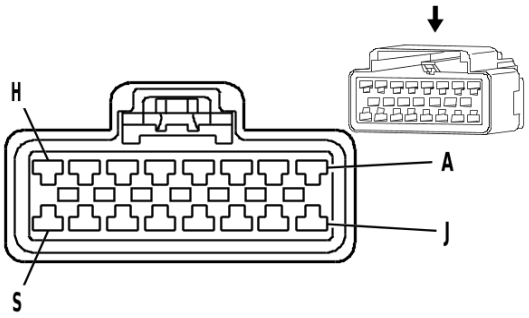
X50A Fuse Block - Underhood X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.35	PK	1639	Run/Crank Ignition 1 Voltage	I	—
A2	—	—	—	Not Occupied	—	—
A3	0.8	RD / WH	2240	Battery Positive Voltage	I	—
A4	0.8	RD / WH	3040	Battery Positive Voltage	I	—
A5	0.5	RD / WH	2540	Battery Positive Voltage	I	—
A6	—	—	—	Not Occupied	—	—
A7	0.8	RD / WH	2740	Battery Positive Voltage	I	—
A8	—	—	—	Not Occupied	—	—
B1	3	RD / WH	3940	Battery Positive Voltage	II	—
B2	0.35	PK	1139	Run/Crank Ignition 1 Voltage	II	—
B3	0.35	PK	1139	Run/Crank Ignition 1 Voltage	II	—
B4	1	RD / WH	1040	Battery Positive Voltage	II	—
B5	1	BN	2109	Trailer Park Lamp Control	II	—
C1	0.5	PK	239	Run/Crank Ignition 1 Voltage	I	—
C2 - C3	—	—	—	Not Occupied	—	—
C4	0.35	OG	5186	Left Trailer Turn Signal Lamp Control	I	—
C5	1	BN	2109	Trailer Park Lamp Control	I	—
C6	1	D-GN	619	Right Rear Turn Signal Lamp Control	I	—
C7	0.8	D-BU / WH	149	Courtesy Lamp Control	I	—

X50A Fuse Block - Underhood X3 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C8	1	YE	618	Left Rear Turn Signal Lamp Control	I	—
D1	0.5	OG	228	Windshield Washer Pump Control	II	—
D2	0.35	YE	5199	Run/Crank Relay Coil Control	II	—
D3	1	L-GN	1624	Trailer Backup Lamp Control	II	—
D4	3	D-BU	47	Trailer Auxiliary Control	II	—
D5 - E1	—	—	—	Not Occupied	—	—
E2	3	RD / WH	4140	Battery Positive Voltage	III	—
F1 - F2	—	—	—	Not Occupied	—	—
G1	0.8	RD / WH	640	Battery Positive Voltage	II	—
G2	0.35	OG	2268	Windshield Washer Relay Control	II	—
G3	0.35	YE	5187	Right Trailer Turn Signal Lamp Control	II	—
G4	2	PU	92	Windshield Wiper Motor High Speed Control	II	—
G5	2	D-GN	95	Windshield Wiper Motor Low Speed Control	II	—
H1	—	—	—	Not Occupied	—	—
H2	1	RD / WH	3840	Battery Positive Voltage	I	—
H3	0.35	TN	28	Horn Relay Control	I	—
H4	0.35	PK / WH	1970	Headlamp Low Beam Relay Control	I	—
H5	0.35	PU	544	DRL Relay Control	I	—
H6	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	I	—
H7	0.5	WH	5065	Stop Lamp Relay Coil Control	I	—
H8	0.35	TN	860	Windshield Wiper Switch High Signal	I	—
J1	1	RD / WH	640	Battery Positive Voltage	II	—
J2	0.8	RD / WH	2940	Battery Positive Voltage	II	—
J3	0.75	GY / BN	2309	Front Park Lamp Control	II	—
J4	0.8	D-BU / WH	1315	Right Front Turn Signal Lamp Control	II	—
J5 - K2	—	—	—	Not Occupied	—	—
K3	0.8	RD / WH	2140	Battery Positive Voltage	I	—
K4	0.5	L-BU	20	Stop Lamp Control	I	—
K5	0.5	L-BU / WH	6311	Cruise/ETC/TCC Brake Signal	I	—
K6	—	—	—	Not Occupied	—	—
K7	0.8	L-BU / WH	1314	Left Front Turn Signal Lamp Control	I	—
K8	0.35	TN / WH	1969	Headlamp High Beam Relay Control	I	—

X50A Fuse Block - Underhood X4



823321

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 15326952
Service Connector: 15306426
Description: 16-Way F 280 GT Series(BK)

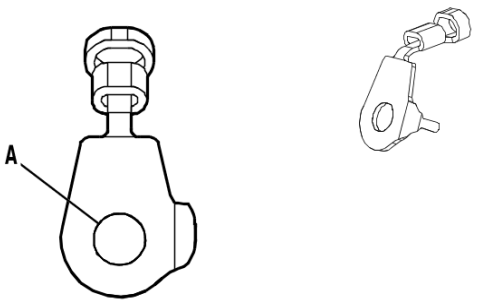
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575753	J-35616-4A (PU)	J-38125-215A

X50A Fuse Block - Underhood X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	—	—	Not Occupied	—	—
B	0.5	GY / BN	2309	Front Park Lamp Control	I	—
C	0.5	GY / BN	2309	Front Park Lamp Control	I	—
D	0.75	D-BU / WH	1315	Right Front Turn Signal Lamp Control	I	—
E	0.75	L-BU / WH	1314	Left Front Turn Signal Lamp Control	I	—
F	0.5 0.8	YE YE	712 712	Left Headlamp Low Beam Control Left Headlamp Low Beam Control	I	— —
G - J	—	—	—	Not Occupied	—	—
K	0.5	YE	712	Left Headlamp Low Beam Control	I	—
L	—	—	—	Not Occupied	—	—
M	0.75	WH	311	Right Headlamp High Beam Control	I	—
N	0.75	WH	711	Left Headlamp High Beam Control	I	—
P	0.75	YE	312	Right Headlamp Low Beam Control	I	—
R - S	—	—	—	Not Occupied	—	—

X50A Fuse Block - Underhood X5



4831180

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 12160208
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

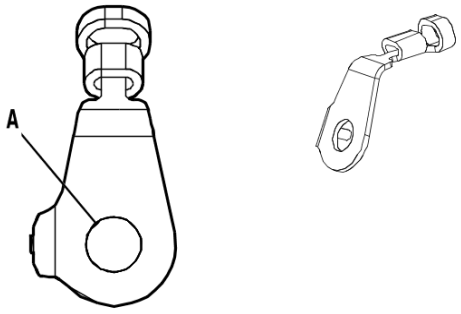
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50A Fuse Block - Underhood X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	19	RD	1	Unfused Battery Positive Voltage	I	—

X50A Fuse Block - Underhood X6



4831192

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13595106
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

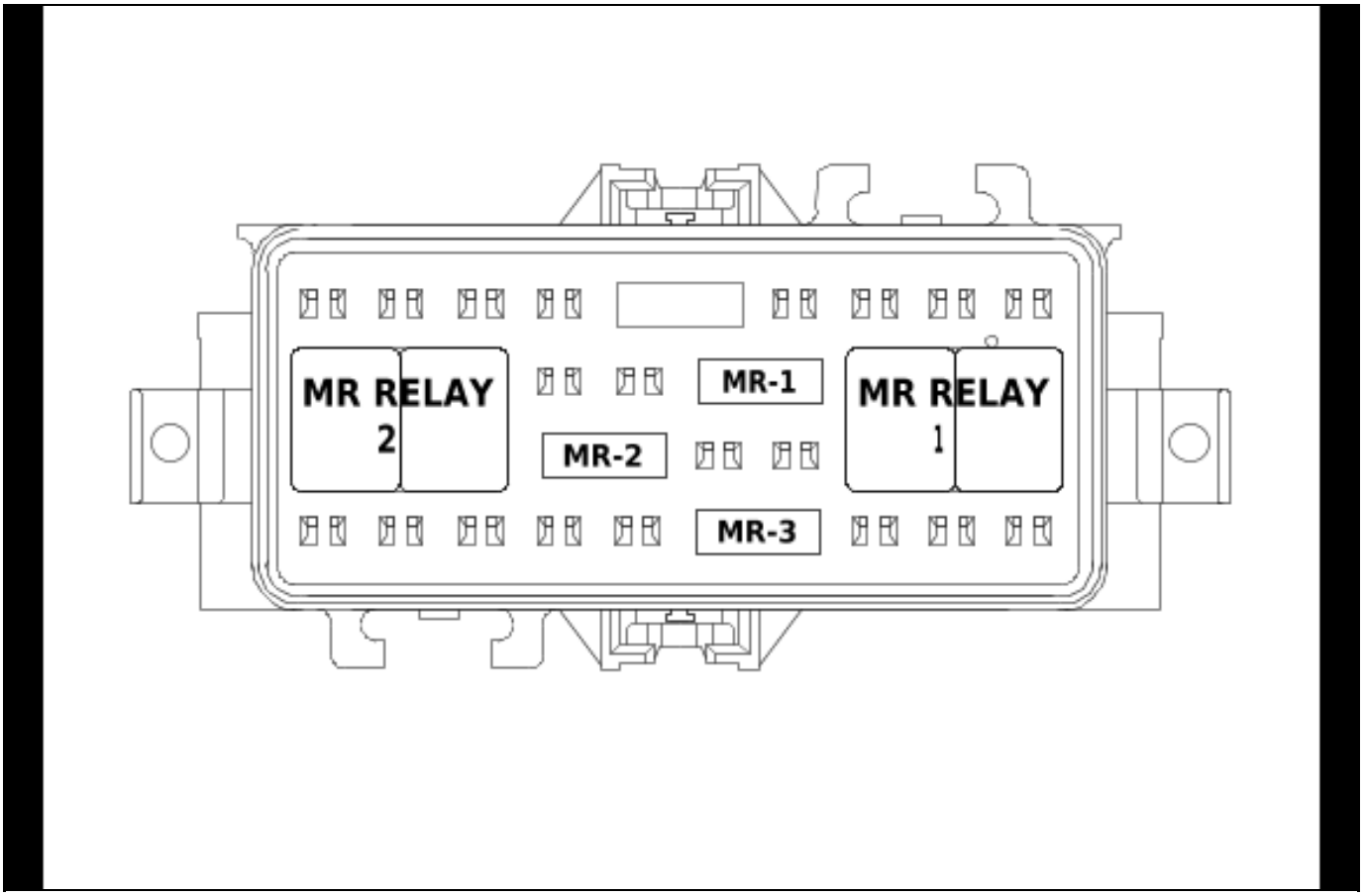
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X50A Fuse Block - Underhood X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	19	RD	842	Battery Positive Voltage	I	—

X50B Fuse Block - Underhood Auxiliary Top View

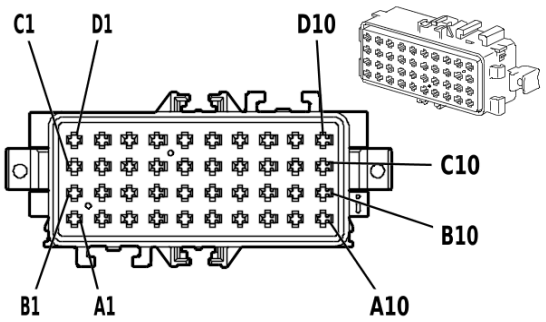


4845612

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	MR-2	F1UB	30A	• KR161A Configurable Provision Relay 1 (9L7)
F2	MR-1	F2UB	30A	• KR161B Configurable Provision Relay 2 (9L7)
F3	MR-3	F3UB	10A	• W25 Blunt Cut - Configurable Provision (9L7)
Relays				
R1	MR RELAY 1	KR90 Door Unlock Relay (WRF), KR161B Configurable Provision Relay 2 (9L7)	—	• W25 Blunt Cut - Configurable Provision
R2	MR RELAY 2	KR97 Door Lock Relay (WRF), KR161A Configurable Provision Relay 1 (9L7)	—	• W25 Blunt Cut - Configurable Provision

X50B Fuse Block - Underhood Auxiliary



2002692

Connector Part Information

Harness Type: Accessory Wiring Harness
OEM Connector: 13607200
Service Connector: Service by Harness - See Part Catalog
Description: 40-Way F 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

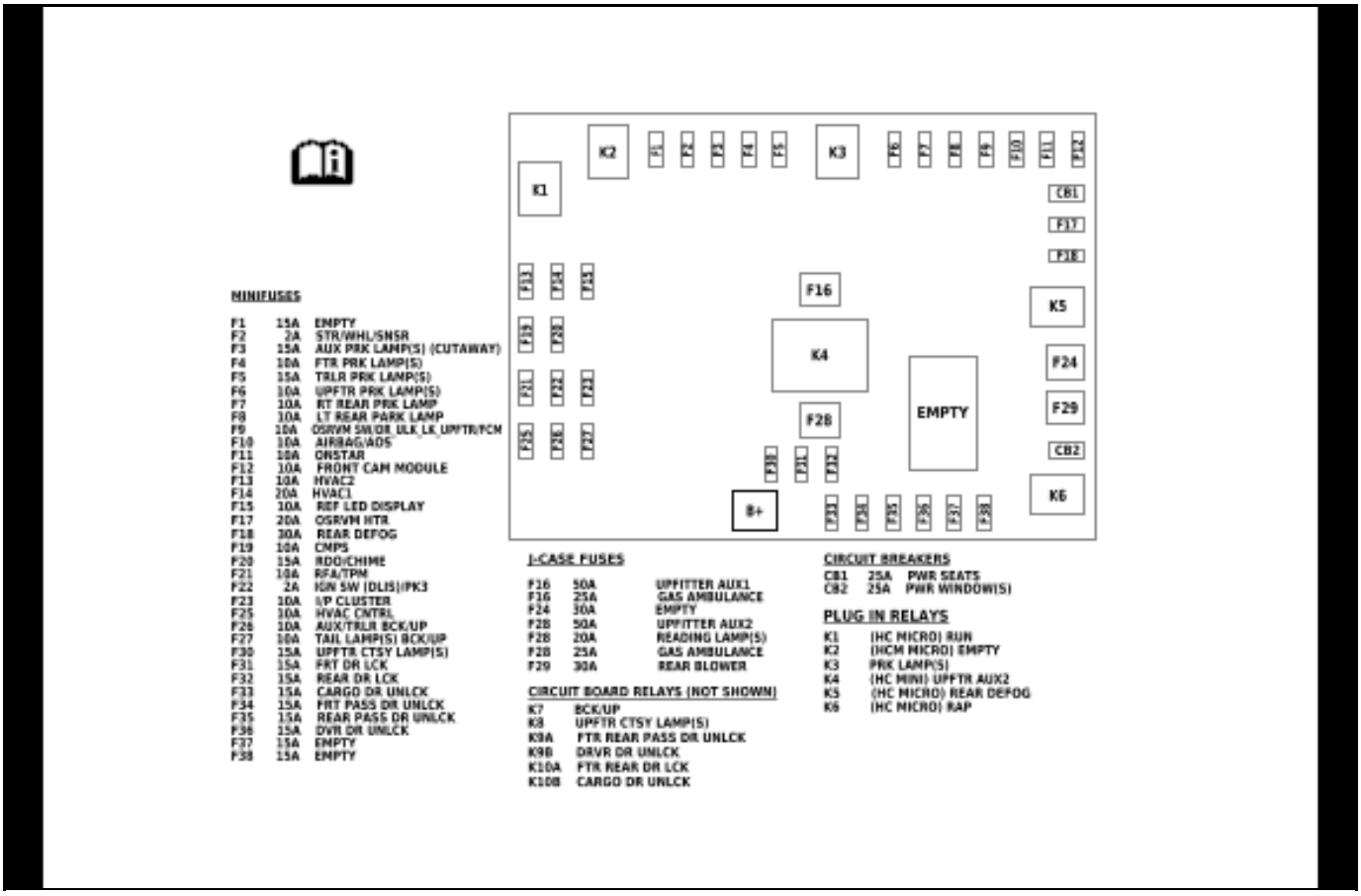
X50B Fuse Block - Underhood Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A5	—	—	—	Not Occupied	—	—
A6	1	RD / BK	102	Battery Positive Voltage	I	—
A7	1	RD / WH	5440	Battery Positive Voltage	I	—
A8 - A10	—	—	—	Not Occupied	—	—
B1	2.5	RD / WH	5440	Battery Positive Voltage	I	—
B2	—	—	—	Not Occupied	—	—
B3	0.5	D-BU	6843	Auxiliary Device Relay 2 Control	I	—
B4	2.5	RD / BK	102	Battery Positive Voltage	I	—
B5	2.5	RD / WH	5440	Battery Positive Voltage	I	—
B6 - B7	—	—	—	Not Occupied	—	—
B8	2.5	RD / WH	5440	Battery Positive Voltage	I	—
B9	—	—	—	Not Occupied	—	—
B10	0.5	L-BU	6842	Auxiliary Device Relay 1 Control	I	—
C1	0.5	BK	1850	Ground	I	—
C2	—	—	—	Not Occupied	—	—
C3	2.5	L-GN	6840	Auxiliary Device 2 Switched Voltage	I	—
C4 - C5	—	—	—	Not Occupied	—	—
C6	2.5	RD / BK	102	Battery Positive Voltage	I	—
C7	2.5	RD / WH	5440	Battery Positive Voltage	I	—
C8	0.5	BK / WH	1551	Signal Ground	I	—
C9	—	—	—	Not Occupied	—	—
C10	2.5	L-GN	6839	Auxiliary Device 1 Switched Voltage	I	—

X50B Fuse Block - Underhood Auxiliary (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D1 - D10	—	—	—	Not Occupied	—	—

X52A Fuse Block - Passenger Compartment Label



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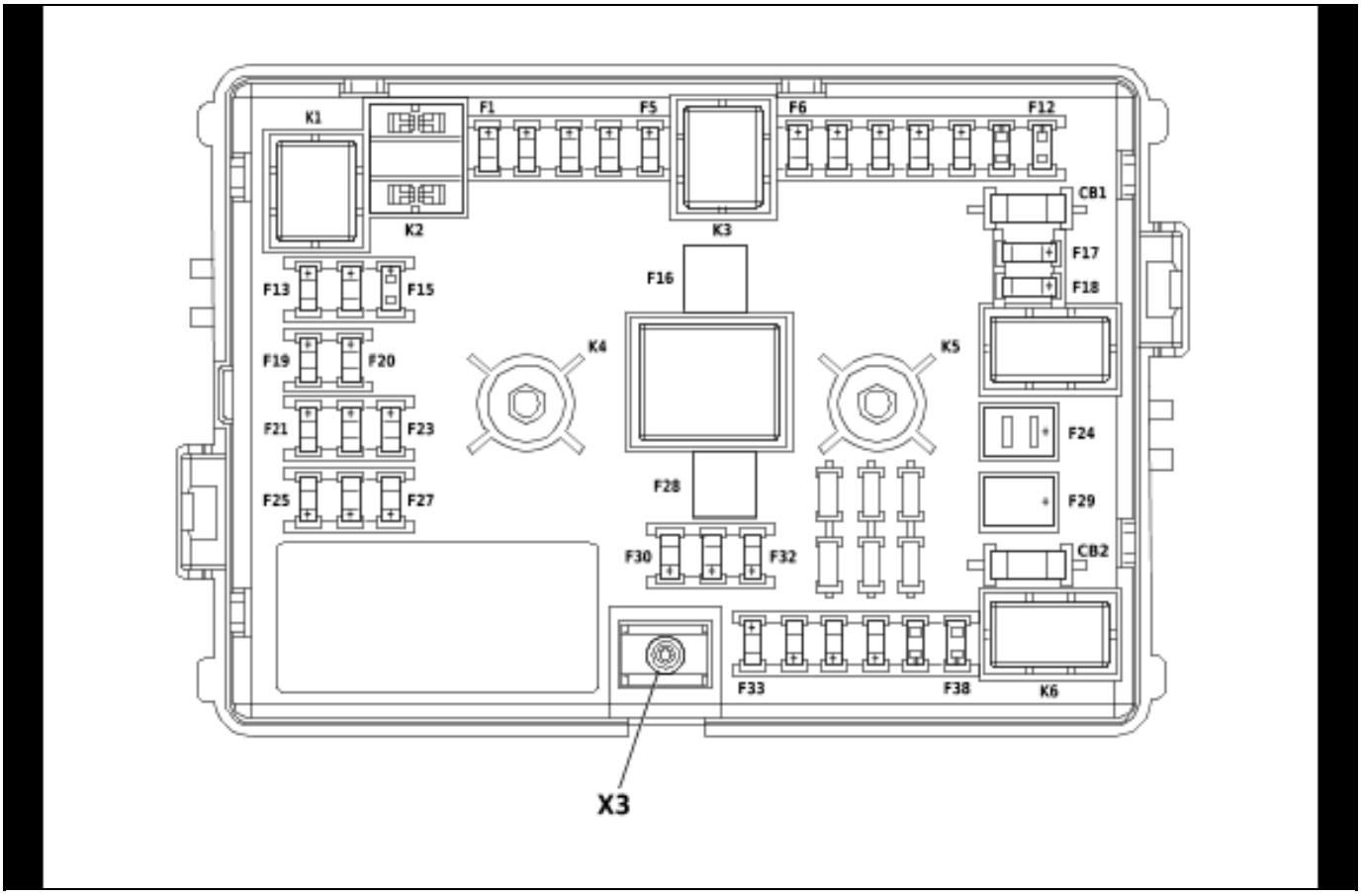
X52A Fuse Block - Passenger Compartment Top View



3988743

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Mini Fuses				
F1	EMPTY	F1PA	15A	• Not Used
F2	STR/WHL/SNSR	F2PA	2A	• S70L Steering Wheel Controls Switch - Left (K34 or W1Y) • S70R Steering Wheel Controls Switch - Right (W1Y)
F3	AUX PRK LAMP(S) (CUT-AWAY)	F3PA	15A	• X405 (Cutaway)
F4	FRT PRK LAMP(S)	F4PA	10A	• E2LF Side Marker Lamp - Left Front • E2RF Side Marker Lamp - Right Front • E4N Park/Turn Signal Lamp - Left • E4P Park/Turn Signal Lamp - Right
F5	TRLR PRK LAMP(S)	F5PA	15A	• X88 Trailer Connector (UY7)
F6	UPFTR PRK LAMP(S)	F6PA	10A	• Not Used
F7	RT REAR PRK LAMP	F7PA	10A	• E5T Tail/Stop and Turn Signal Lamp - Right (Cargo or Passenger)
F8	LT REAR PARK LAMP	F8PA	10A	• E5S Tail/Stop and Turn Signal Lamp - Left (Cargo or Passenger) • E7 License Plate Lamp (Cargo or Passenger)

Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F9	OSRVM SW/ DR_ULK_L-K_UPFTR/FCM	F9PA	10A	• B174W Frontview Camera - Windshield • S52 Outside Rearview Mirror Switch (DEB or DE5)
F10	AIRBAG/AOS	F10PA	10A	• K36 Inflatable Restraint Sensing and Diagnostic Module
F11	ONSTAR	F11PA	10A	• K73 Telematics Communication Interface Control Module (UE1)
F12	FRONT CAM MODULE	F12PA	10A	• Not Used
F13	HVAC2	F13PA	10A	• K33A HVAC Control Module - Auxiliary • KR32B Blower Motor High Speed Relay - Auxiliary (C69/C36/ENC) • KR32C Blower Motor Low Speed Relay - Auxiliary (C69/C36/ENC) • KR32D Blower Motor Medium Speed Relay - Auxiliary (C69/C36/ENC) • KR81 Auxiliary Battery Relay 1 (TP3) • M6 Air Temperature Door Actuator • M6B Air Temperature Door Actuator - Auxiliary (C69/C36/ENC) • M37B Mode Door Actuator - Auxiliary (C69/C36/ENC) • S34 HVAC Controls Switch Assembly (C49/DE5/C60) • S34F HVAC Controls Switch Assembly - Auxiliary Front • S34R HVAC Controls Switch Assembly - Auxiliary Rear (Rear HVAC Controls)
F14	HVAC1	F14PA	20A	• S34 HVAC Controls Switch Assembly • X81 Accessory Power Receptacle - 110V AC (KI4)
F15	REF LED DIS-PLAY	F15PA	10A	• P43 Collision Alert Indicators
F17	OSRVM HTR	F17PA	20A	• A9A Outside Rearview Mirror - Driver (DEB or DE5) • A9B Outside Rearview Mirror - Passenger (DEB or DE5)
F18	REAR DEFOG	F18PA	30A	• E18L Rear Defogger Grid - Left (C49) • E18R Rear Defogger Grid - Right (C49)
F19	CMPS	F19PA	10A	• B176 Multi-axis Acceleration Sensor Module • K18 Compass Module (U80)
F20	RDO/CHIME	F20PA	15A	• A11 Radio (Without UL5) • A12 Digital Radio Receiver Control Module (U2K)
F21	RFA/TPM	F21PA	10A	• K77 Remote Control Door Lock Receiver (ATG or UJM)
F22	IGN SW (DLIS)/ PK3	F22PA	2A	• K64 Content Theft Deterrent Control Module • S39 Ignition Switch
F23	I/P CLUSTER	F23PA	10A	• P16 Instrument Cluster
F25	HVAC CNTRL	F25PA	10A	• S34 HVAC Controls Switch Assembly (C49 or DE5)
F26	AUX/TRLR BCK/ UP	F26PA	10A	• P3 Backup Alarm (8S3) • X88 Trailer Connector (-NE7) • X405 (Cutaway) • X450 (NE7)
F27	TAIL LAMP(S) BCK/UP	F27PA	10A	• E5A Backup Lamp - Left (Cargo or Passenger) • E5B Backup Lamp - Right (Cargo or Passenger)

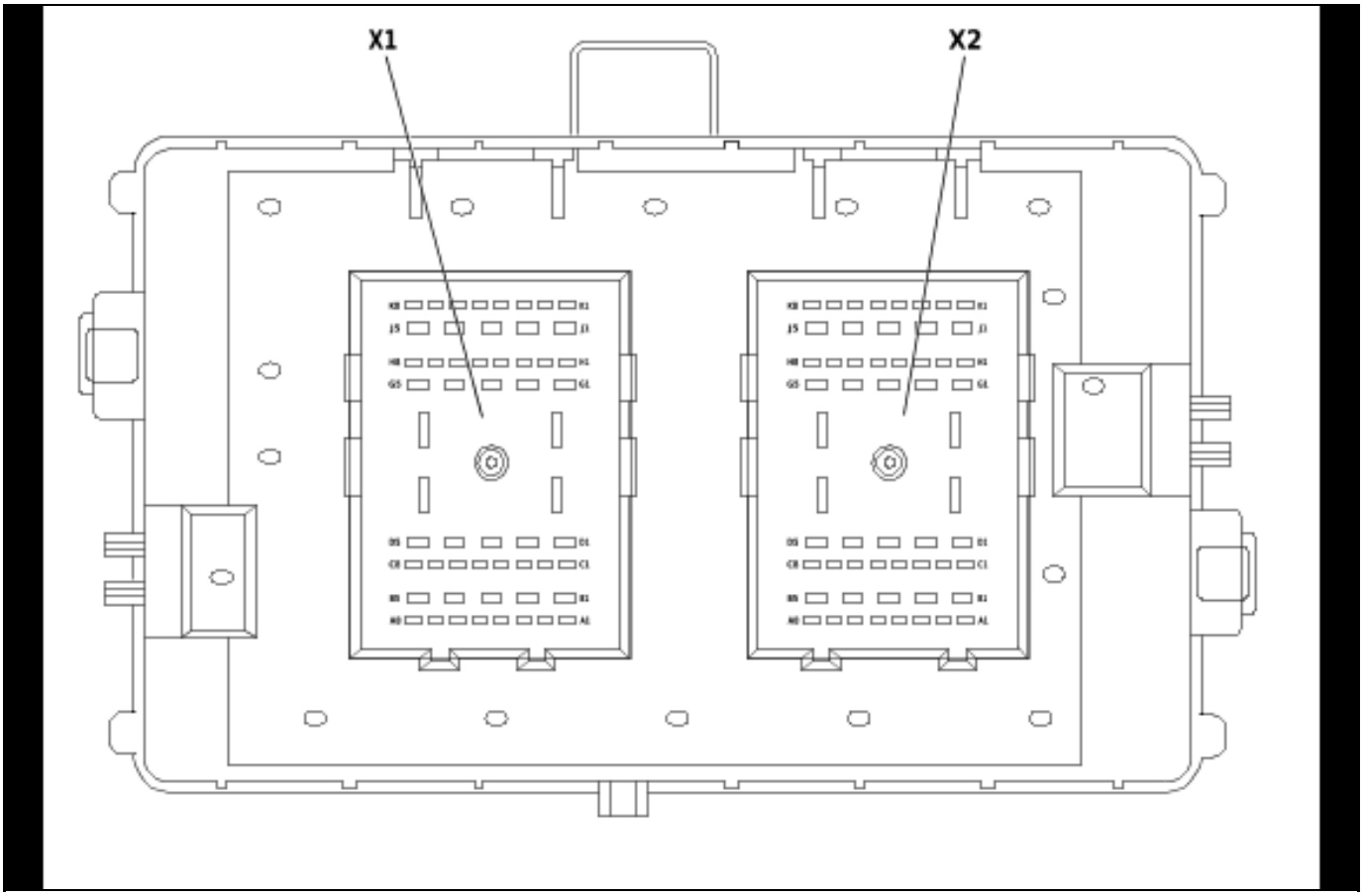
Usage Table (cont'd)

No.	Device Label Name	Device Assigned Name	Rating	Description
F30	UPFTR CTSY LAMP(S)	F30PA	15A	• E36AC Dome Lamp - Left Roof Rail (Cargo) • E36AD Dome Lamp - Right Roof Rail (Cargo) • E36AH Dome Lamp (Cargo) • E37F Dome/Reading Lamps - Front • E37M Dome/Reading Lamps - Middle (Passenger) • E37R Dome/Reading Lamps - Rear (Passenger) • K9 Body Control Module • X405
F31	FRT DR LCK	F31PA	15A	• A23D Door Latch Assembly - Driver (AU3) • A23P Door Latch Assembly - Passenger (AU3)
F32	REAR DR LCK	F32PA	15A	• M13 Door Latch Assembly - Rear Cargo (Passenger or Cargo with AU3) • M14RR Door Lock Actuator - Right Rear (E24 or YA2) • X87RB Sliding Door Jamb Contact Plate - Right Body (E24 or YA2)
F33	CARGO DR UNLCK	F33PA	15A	• M13 Door Latch Assembly - Rear Cargo (Cargo or Passenger with AU3)
F34	FRT PASS DR UNLCK	F34PA	15A	• A23P Door Latch Assembly - Passenger (AU3)
F35	REAR PASS DR UNLCK	F35PA	15A	• KR90A Cargo Door Unlock Relay (AU3) • M14RR Door Lock Actuator - Right Rear (AU3) • X87RB Sliding Door Jamb Contact Plate - Right Body (AU3)
F36	DVR DR UNLCK	F36PA	15A	• A23D Door Latch Assembly - Driver (AU3)
F37	EMPTY	F37PA	15A	• Not Used
F38	EMPTY	F38PA	15A	• Not Used
J-Case Fuses				
F16	UPFITTER AUX1	F16PA	50A	• W12 Blunt Cut - Emergency Vehicle Provision (YF1) • X289 (PRP)
F16	GAS AMBULANCE	F16PA	25A	• Not Used
F24	EMPTY	F24PA	30A	• Not Used
F28	UPFITTER AUX2	F28PA	50A	• W12 Blunt Cut - Emergency Vehicle Provision (YF1)
F28	READING LAMP(S)	F28PA	20A	• Not Used
F28	GAS AMBULANCE	F28PA	25A	• Not Used
F29	REAR BLOWER	F29PA	30A	• KR32B Blower Motor High Speed Relay - Auxiliary (C36/C69/ENC) • KR32C Blower Motor Low Speed Relay - Auxiliary (C36/C69/ENC) • KR32D Blower Motor Medium Speed Relay - Auxiliary (C36/C69/ENC)
Circuit Breakers				
CB1	PWR SEATS	CB1PA	25A	• S64D Seat Adjuster Switch - Driver (AG1) • S64P Seat Adjuster Switch - Passenger (AG2)
CB2	PWR WINDOW(S)	CB2PA	25A	• S79D Window Switch - Driver (A31) • S79P Window Switch - Passenger (A31)

Usage Table (cont'd)

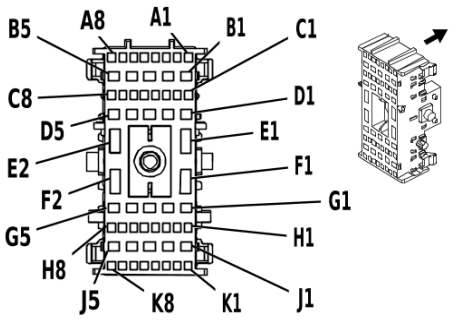
No.	Device Label Name	Device Assigned Name	Rating	Description
Relays				
K1	RUN	KR74 Ignition Run Relay	—	• F13PA • F14PA • F15PA • F19PA • KR77 Ignition Power Provision Relay
K2	EMPTY	KR150 Relay - Spare	—	• Not Used
K3	PRK LAMP(S)	KR53 Park Lamps Relay	—	• F3PA • F4PA • F5PA • F6PA • F7PA • F8PA
K4	UPFTR AUX2	KR77 Ignition Power Provision Relay	—	• F28PA
K5	REAR DEFOG	KR5 Rear Defogger Relay	—	• F17PA • F18PA
K6	RAP	KR76 Retained Accessory Power Relay	—	• CB2PA • F37PA • F38PA
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
K7	BCK/UP	KR40 Backup Lamp Relay	—	• F26PA • F27PA
K8	UPFTR CTSY LAMP(S)	KR78 Courtesy Lamps Provision Relay	—	• F30PA
K9A	FTR REAR PASS DR UNLCK	KR90P Passenger/ Cargo Door Unlock Relay	—	• F34PA • F35PA
K9B	DRVR DR UNLCK	KR92D Driver Door Unlatch Relay	—	• F36PA
K10A	FTR REAR DR LCK	KR97 Door Lock Relay	—	• F31PA • F32PA
K10B	CARGO DR UNLCK	KR90A Cargo Door Unlock Relay	—	• F33PA

X52A Fuse Block - Passenger Compartment Bottom View



2832070

X52A Fuse Block - Passenger Compartment X1



2083844

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15477823
Service Connector: 13574911
Description: 56-Way F 150, 280 GT Metri-Pack 800 Series(L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575465	J-35616-44 (YE)	J-38125-558
II	13575735	J-35616-14 (GN)	J-38125-215A
III	13575753	J-35616-4A (PU)	J-38125-215A
IV	Not required	No Tool Required	No Tool Required

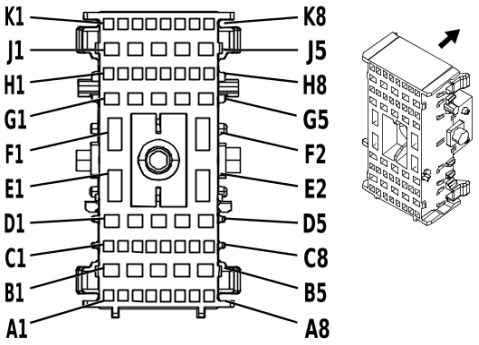
X52A Fuse Block - Passenger Compartment X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A3	—	—	—	Not Occupied	—	—
A4	0.5	YE	6817	LED Backlight Dimming Control 1	II	—
A5	0.35	D-BU	45	Park Lamp Relay Control	II	—
A6	0.35	BN	6136	Control	II	—
A7 - A8	—	—	—	Not Occupied	—	—
B1	0.8	RD / WH	3240	Battery Positive Voltage	III	—
B2	1	BN	2109	Trailer Park Lamp Control	III	—
B3	0.35	BN	341	Run Ignition 3 Voltage	III	—
B4	0.75	GY / BN	2309	Front Park Lamp Control	III	—
B5	1	BN	2109	Trailer Park Lamp Control	III	—
C1	1	YE	618	Left Rear Turn Signal Lamp Control	II	—
C2	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	II	—
C3	1	D-GN	619	Right Rear Turn Signal Lamp Control	II	—
C4	0.35	WH	193	Rear Defogger Relay Control	II	—
C5	0.35	BN	341	Run Ignition 3 Voltage	II	—
C6	—	—	—	Not Occupied	—	—
C7	0.35	OG	300	Run Ignition 3 Voltage	II	—
C8 - D3	—	—	—	Not Occupied	—	—
D4	0.5	VT / BK	1639	Run/Crank Ignition 1 Voltage	III	—

X52A Fuse Block - Passenger Compartment X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D5	0.5 1	D-BU BN	6807 141	DC/AC Inverter Control Run Ignition 3 Voltage	III	— —
E1	—	RD / BK	1042	Battery Positive Voltage	IV	—
E2	0.8	BK	350	Ground	I	—
F1 - G2	—	—	—	Not Occupied	—	—
G3	0.8 0.5	D-BU / WH GY	1315 5861	Right Front Turn Signal Lamp Control Passenger Side Object Detection LED Signal 1	III III	DE5 UFT
G4	1	RD / WH	340	Battery Positive Voltage	III	—
G5	—	—	—	Not Occupied	—	—
H1	0.8 0.5	L-BU / WH GY / YE	1314 5853	Left Front Turn Signal Lamp Control Driver Side Side Object Detection LED Signal 1	II II	DE5 UFT
H2	0.8 1	D-BU / WH D-BU / WH	149 149	Courtesy Lamp Control Courtesy Lamp Control	II	— —
H3	0.35	BK / WH	351	Signal Ground	II	—
H4	0.35	YE	43	Accessory Ignition Voltage	II	—
H5	0.8	RD / WH	4440	Battery Positive Voltage	II	—
H6	0.35	RD / WH	2840	Battery Positive Voltage	II	—
H7	0.35	RD / WH	540	Battery Positive Voltage	II	—
H8	0.5	RD / WH	5340	Battery Positive Voltage	II	—
J1 - J4	—	—	—	Not Occupied	—	—
J5	1	L-GN	1624	Trailer Backup Lamp Control	III	—
K1	—	—	—	Not Occupied	—	—
K2	0.5	YE	356	Driver Door Lock Relay Unlock Control	II	—
K3	0.5	L-BU	244	Passenger Door Lock Switch Lock Control	II	—
K4	0.5	L-BU	244	Passenger Door Lock Switch Lock Control	II	—
K5	0.5	YE	356	Driver Door Lock Relay Unlock Control	II	—
K6 - K7	—	—	—	Not Occupied	—	—
K8	0.35	D-BU	38	Backup Lamp Relay Control	II	—

X52A Fuse Block - Passenger Compartment X2



1581655

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15477822
Service Connector: 19115189
Description: 56-Way F 150, 280 GT Metri-Pack 800 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575735	J-35616-14 (GN)	J-38125-215A
II	13575756	J-35616-4A (PU)	J-38125-215A
III	19367554	J-35616-44 (YE)	J-38125-558
IV	Not required	No Tool Required	No Tool Required

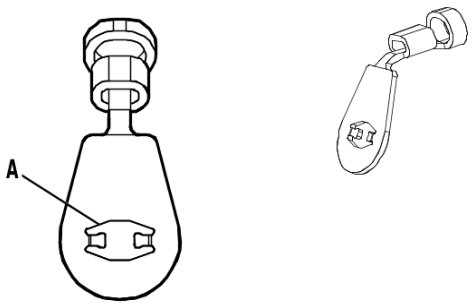
X52A Fuse Block - Passenger Compartment X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1 - A2	—	—	—	Not Occupied	—	—
A3	0.5	RD / WH	3440	Battery Positive Voltage	I	—
A4	0.5	BN	2509	Left Rear Park Lamp Control	I	—
A5	0.5	BN	2609	Right Rear Park Lamp Control	I	—
A6	0.5 0.5	RD / WH RD / GN	4340 3140	Battery Positive Voltage Battery Positive Voltage	I I	DE5 UFL
A7 - A8	—	—	—	Not Occupied	—	—
B1	3	RD / WH	3540	Battery Positive Voltage	II	—
B2	3	RD / WH	3540	Battery Positive Voltage	II	—
B3	1	RD / WH	3240	Battery Positive Voltage	II	—
B4 - C1	—	—	—	Not Occupied	—	—
C2	1	RD / WH	3240	Battery Positive Voltage	I	—
C3	0.35	BN	341	Run Ignition 3 Voltage	I	—
C4	0.35	BN	341	Run Ignition 3 Voltage	I	—
C5	0.35	BN	341	Run Ignition 3 Voltage	I	—
C6	1	D-GN	619	Right Rear Turn Signal Lamp Control	I	—
C7	1	YE	618	Left Rear Turn Signal Lamp Control	I	—
C8	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
D1	5	PU	293	Rear Defogger Grid Control	II	—

X52A Fuse Block - Passenger Compartment X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D2	5	PU	293	Rear Defogger Grid Control	II	—
D3	0.8	OG	2267	Outside Rearview Mirror Heater Control	II	—
D4	0.8	OG	2267	Outside Rearview Mirror Heater Control	II	—
D5 - E1	—	—	—	Not Occupied	—	—
E2	5	RD / BK	1042	Battery Positive Voltage	III	—
F1	5	RD / WH	1740	Battery Positive Voltage	III	—
F2	5	BN	541	Run Ignition 3 Voltage	III	—
G1	3	D-GN	1001	Retained Accessory Power Ignition Voltage	II	—
G2	3	D-GN	1001	Retained Accessory Power Ignition Voltage	II	—
G3	—	—	—	Not Occupied	—	—
G4	1	GY	295	Door Lock Actuator Lock Control	II	—
G5	1	GY	295	Door Lock Actuator Lock Control	II	—
H1	—	—	—	Not Occupied	—	—
H2	0.5	BK / BN	6045	Steering Angle Sensor Low Reference	I	—
H3	0.35	BK / WH	351	Signal Ground	I	—
H4	—	—	—	Not Occupied	—	—
H5	0.5 0.5	GY D-BU / WH	5861 1315	Passenger Side Object Detection LED Signal 1 Right Front Turn Signal Lamp Control	IV I	UFT - UFT
H6	0.5 0.5	GY / YE L-BU / WH	5853 1314	Driver Side Side Object Detection LED Signal 1 Left Front Turn Signal Lamp Control	IV I	UFT - UFT
H7	0.5	D-BU / WH	149	Courtesy Lamp Control	I	—
H8	0.8 1	D-BU / WH D-BU / WH	149 149	Courtesy Lamp Control Courtesy Lamp Control	I I	CARGO PASSENGER
J1	0.8	TN	694	Driver Door Lock Actuator Unlock Control	II	—
J2	1	TN	294	Door Lock Actuator Unlock Control	II	—
J3	0.8	TN	294	Door Lock Actuator Unlock Control	II	—
J4	0.8	TN	294	Door Lock Actuator Unlock Control	II	—
J5	0.8	GY	295	Door Lock Actuator Lock Control	II	—
K1 - K2	—	—	—	Not Occupied	—	—
K3	1	TN / BK	1095	Right Rear Door Lock Actuator Unlock Control	I	—
K4 - K6	—	—	—	Not Occupied	—	—
K7	1	TN	294	Door Lock Actuator Unlock Control	I	—
K8	1	L-GN	24	Backup Lamp Control	I	—

X52A Fuse Block - Passenger Compartment X3



4831037

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12160241
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

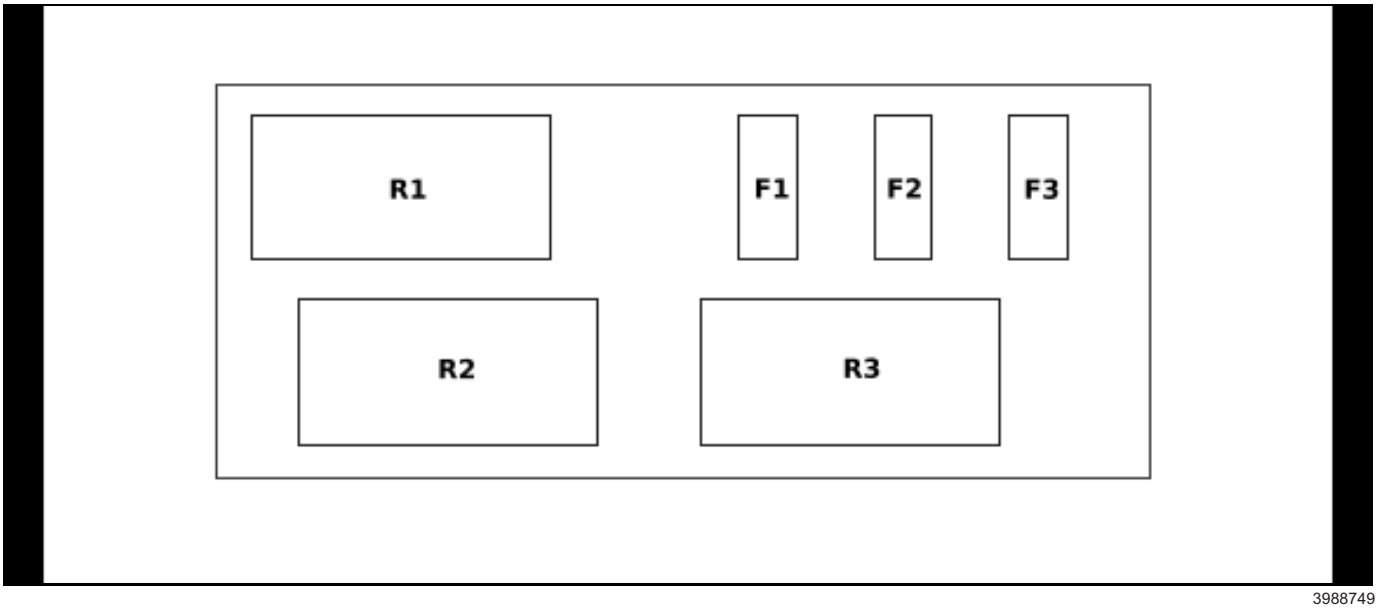
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X52A Fuse Block - Passenger Compartment X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	19	RD	842	Battery Positive Voltage	I	—

X53A Fuse Block - Rear Body Top View (PRP)

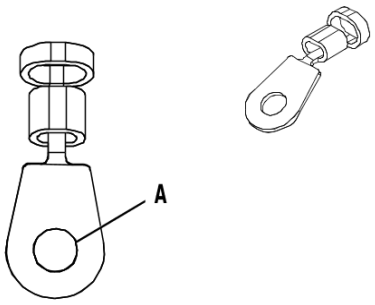


3988749

Usage Table

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	DOME FLUORESCENT WORK LAMPS	F1RA	10A	• E21A Fluorescent Work Lamp - Right Access Panel • E21F Fluorescent Work Lamp - Front Cargo • E21LF Fluorescent Work Lamp - Left Front Access Panel • E21R Fluorescent Work Lamp - Rear Cargo • E21LR Fluorescent Work Lamp - Left Rear Access Panel
F2	PANEL ACTUATOR	F2RA	15A	• KR89LF Left Front Access Panel Relay • KR89LR Left Rear Access Panel Relay • KR89RR Right Rear Access Panel Relay
F3	SPARE	F3RA	—	• Not Used
Relays				
R1	LEFT REAR ACCESS PANEL RELAY	KR89LR Left Rear Access Panel Relay	—	• M2C Access Panel Unlatch Actuator - Left Rear Side Front • M2D Access Panel Unlatch Actuator - Left Rear Side Rear
R2	LEFT FRONT ACCESS PANEL RELAY	KR89LF Left Front Access Panel Relay	—	• M2A Access Panel Unlatch Actuator - Left Front Side Front • M2B Access Panel Unlatch Actuator - Left Front Side Rear
R3	RIGHT REAR ACCESS PANEL RELAY	KR89RR Right Rear Access Panel Relay	—	• M2E Access Panel Unlatch Actuator - Right Side Front • M2F Access Panel Unlatch Actuator - Right Side Rear

X55U Fuse Holder - Starter X1 (L8T)



4329341

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 15491241
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

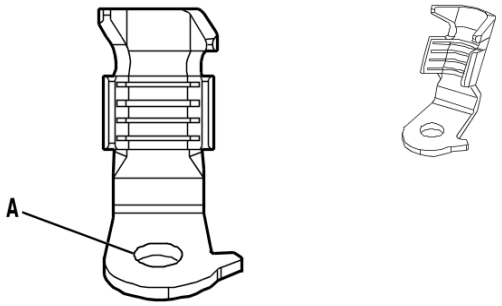
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X55U Fuse Holder - Starter X1 (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	32	RD	1	Unfused Battery Positive Voltage	I	—

X55U Fuse Holder - Starter X1 (LV1)



4937583

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 35116268
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

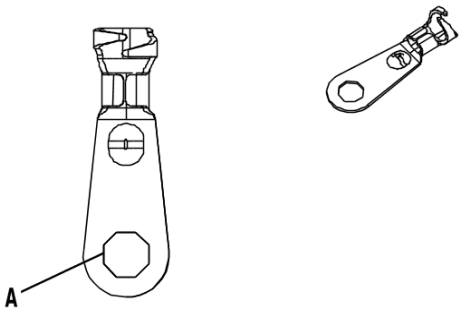
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X55U Fuse Holder - Starter X1 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	32	RD	1	Unfused Battery Positive Voltage	I	—

X55U Fuse Holder - Starter X2 (LV1)



3214043

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 33257772
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

Terminal Part Information

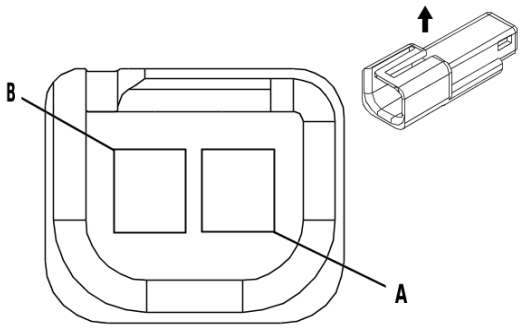
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X55U Fuse Holder - Starter X2 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	25	RD	1	Unfused Battery Positive Voltage	I	—

Component Connector End Views

A3L Sunshade - Left



35441

Connector Part Information

Harness Type: Headliner
OEM Connector: 12047663
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series(BK)

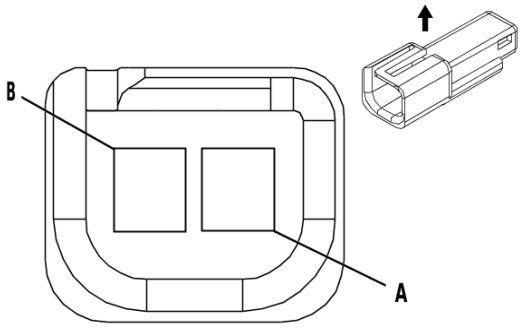
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

A3L Sunshade - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	OG	1732	Control Module 12V Reference 3	I	—
B	—	BK	1850	Ground	I	—

A3R Sunshade - Right



35441

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required

A3R Sunshade - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	OG	1732	Control Module 12V Reference 3	I	—
B	0.5	BK	1850	Ground	I	—

A7 Fuel Pump and Level Sensor Assembly

—

Connector Part Information

Harness Type: Fuel Tank Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F

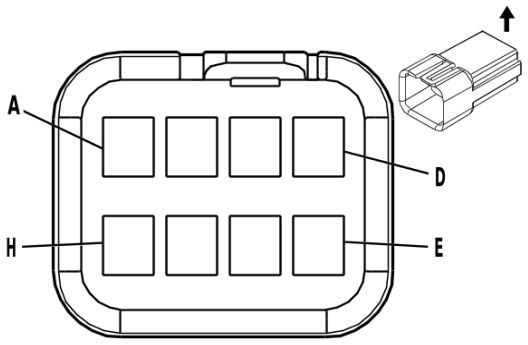
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A7 Fuel Pump and Level Sensor Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY	120	Fuel Pump Control	I	—
2	—	YE / GY	4137	Fuel Pump Supply Voltage Phase 2	I	—
3	—	WH / BN	4138	Fuel Pump Supply Voltage Phase 3	I	—
4	—	BK / GN	6281	Fuel Level Sensor Low Reference	I	—
5	—	D-BU / VT	1589	Primary Fuel Level Sensor Signal	I	—

A9A Outside Rearview Mirror - Driver



62434

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 12065396
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 Metri-Pack Series(NA)

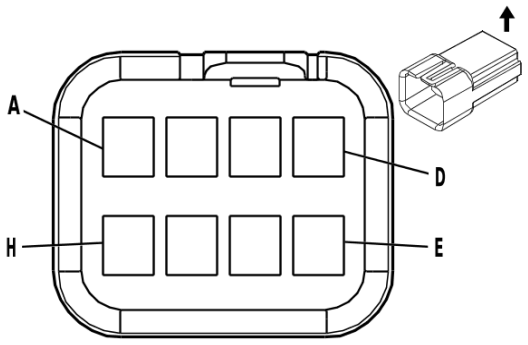
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required

A9A Outside Rearview Mirror - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	450	Ground	I	—
B	0.5	GY / YE	5853	Driver Side Side Object Detection LED Signal 1	I	UFT
C	0.8	OG	2267	Outside Rearview Mirror Heater Control	I	—
D	0.5	BK	450	Ground	I	—
E	0.35	YE	88	Left Outside Rearview Mirror Motor Up Control	I	—
F	0.35	L-GN	89	Left Outside Rearview Mirror Motor Down Control	I	—
G	0.35	WH	81	Left Outside Rearview Mirror Motor Right Control	I	—
H	0.35	YE	88	Left Outside Rearview Mirror Motor Up Control	I	—

A9B Outside Rearview Mirror - Passenger



62434

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 12162427
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 Metri-Pack Series(NA)

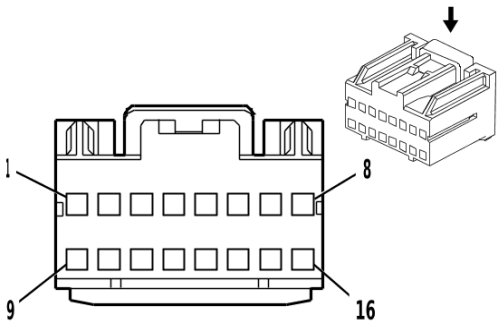
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required
II	Not required	No Tool Required	No Tool Required

A9B Outside Rearview Mirror - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	1850	Ground	I	—
B	— 0.5	D-BU / WH GY	1315 5861	Right Front Turn Signal Lamp Control Passenger Side Object Detection LED Signal 1	II I	— UFT
C	0.8	OG	2267	Outside Rearview Mirror Heater Control	I	—
D	0.5	BK	1850	Ground	I	—
E	0.35	BN / WH	1498	Right Outside Rearview Mirror Motor Up Control	I	—
F	0.35	PU / WH	889	Right Outside Rearview Mirror Motor Down Control	I	—
G	0.35	OG / WH	881	Right Outside Rearview Mirror Motor Right Control	I	—
H	0.35	BN / WH	1498	Right Outside Rearview Mirror Motor Up Control	I	—

A10 Inside Rearview Mirror (-UEU/UFL)



1711009

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 15441350
Service Connector: 15306351
Description: 16-Way F 100A Micro-Pack Series(BK)

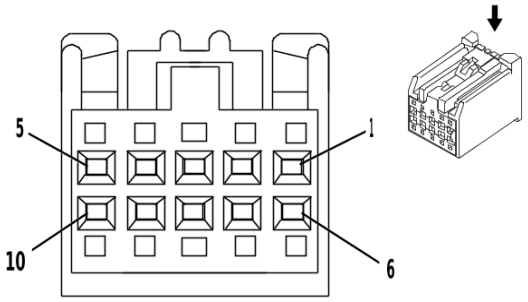
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575546	J-35616-16 (L-GN)	J-38125-559

A10 Inside Rearview Mirror (-UEU/UFL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 5	—	—	—	Not Occupied	—	—
6	0.5	WH	7641	Frontview Camera 2 Signal [+]	I	- UEU
7	0.5	L-BU	7642	Frontview Camera 2 Signal [-]	I	- UEU/ UFL
8	0.35 0.5	BK / WH BK / WH	351 351	Signal Ground Signal Ground	I I	U80 - U80
9	0.5	L-GN	24	Backup Lamp Control	I	—
10 - 12	—	—	—	Not Occupied	—	—
13	0.5	PK	239	Run/Crank Ignition 1 Voltage	I	- UEU/ UFL
14 - 16	—	—	—	Not Occupied	—	—

A10 Inside Rearview Mirror (UEU/UFL)



2180211

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 13815336
Service Connector: 13577390
Description: 10-Way F 0.64 Kaizen Series(BK)

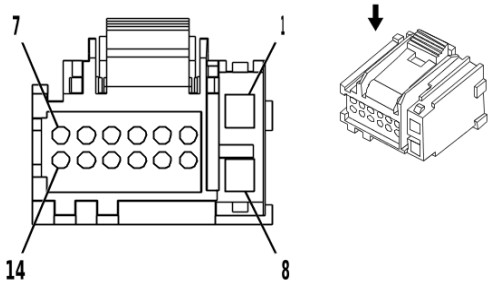
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575742	J-35616-64B (L-BU)	J-38125-215A

A10 Inside Rearview Mirror (UEU/UFL)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN / WH	24	Backup Lamp Control	I	—
2	0.5	VT / WH	239	Run/Crank Ignition 1 Voltage	I	UEU/ UFL
3 - 4	—	—	—	Not Occupied	—	—
5	0.5	BK / WH	351	Signal Ground	I	—
6	0.5	D-BU	7641	Frontview Camera 2 Signal [+]	I	—
7	0.5	WH	7642	Frontview Camera 2 Signal [-]	I	—
8 - 10	—	—	—	Not Occupied	—	—

A11 Radio X1



2684742

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13545675
Service Connector: 13580448
Description: 14-Way F 0.64 Micro-Pack, 150 GT Series(BK)

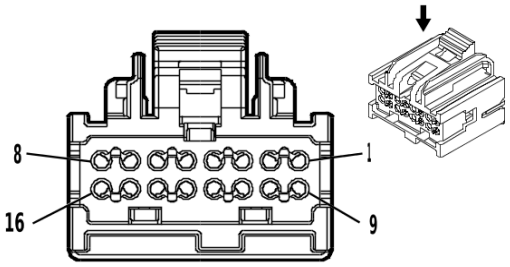
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575735	J-35616-14 (GN)	J-38125-215A

A11 Radio X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	RD / WH	340	Battery Positive Voltage	I	—
2	0.8	D-BU	1857	Left Front Midrange Speaker [+] Control	I	—
3	0.8	OG	1853	Right Front Midrange Speaker [+] Control	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.35	YE	6817	LED Backlight Dimming Control 1	I	—
8	1	BK / WH	351	Signal Ground	I	—
9	0.8	L-BU	1957	Left Front Midrange Speaker [-] Control	I	—
10	0.8	D-GN	1953	Right Front Midrange Speaker [-] Control	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
14	—	—	—	Not Occupied	—	—

A11 Radio X2



2127936

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13567860
Service Connector: 13504130
Description: 16-Way F 64 Micro-Series(PU)

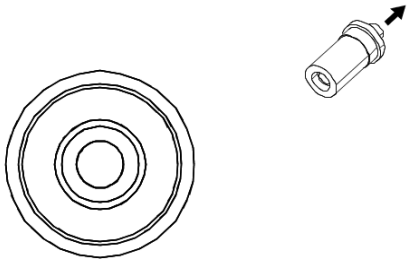
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579976	J-35616-64B (L-BU)	J-38125-21

A11 Radio X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN / WH	367	Secondary Radio Receiver Left Audio Signal	I	—
2	0.35	D-GN / WH	368	Secondary Radio Receiver Right Audio Signal 1	I	—
3 - 4	—	—	—	Not Occupied	—	—
5	0.8	TN	1859	Left Rear Midrange Speaker [+] Control	I	—
6	0.8	TN	1855	Right Rear Midrange Speaker [+] Control	I	—
7	0.8	D-BU	658	Cellular Telephone Voice Signal	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	TN / WH	372	Secondary Radio Receiver Audio [-] Control	I	—
10	0.35	GY	388	Secondary Radio Receiver Right Audio Signal 2	I	—
11 - 12	—	—	—	Not Occupied	—	—
13	0.8	WH	1959	Left Rear Midrange Speaker [-] Control	I	—
14	0.8	OG	1955	Right Rear Midrange Speaker [-] Control	I	—
15	0.8	L-BU / BK	659	Cellular Telephone Voice Low Reference	I	—
16	—	—	—	Not Occupied	—	—

A11 Radio X3



3264028

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX
OEM Connector: 13514585
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Snap Lock Coax Type(BK)

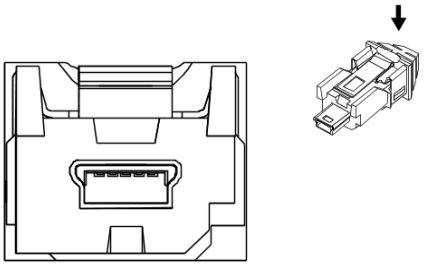
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	Coax Cable	—	(AM/FM) Antenna RF Signal	I	—

A11 Radio X6



2791449

Connector Part Information

Harness Type: Instrument Panel Wiring Harness USB
OEM Connector: 13668059
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type(BK)

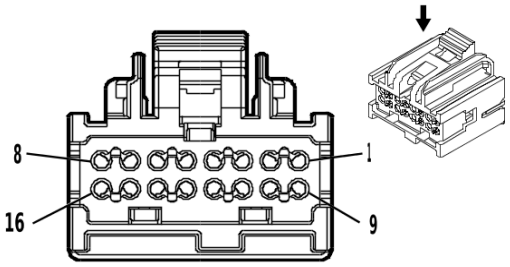
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

A11 Radio X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

A12 Digital Radio Receiver Control Module X1



2127936

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13568238
Service Connector: 13504130
Description: 16-Way F 64 Micro-Series(BK)

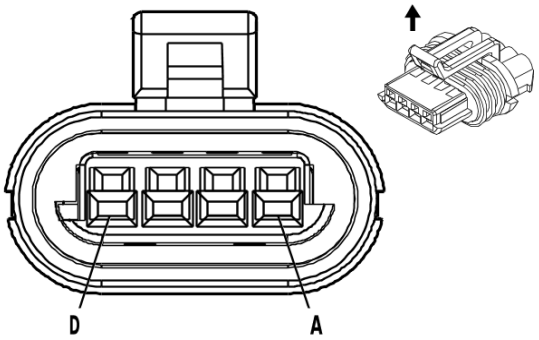
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579976	J-35616-64B (L-BU)	J-38125-21

A12 Digital Radio Receiver Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	TN / WH	372	Secondary Radio Receiver Audio [-] Control	I	—
2	0.35	BN / WH	367	Secondary Radio Receiver Left Audio Signal	I	—
3	0.35	D-GN / WH	368	Secondary Radio Receiver Right Audio Signal 1	I	—
4	0.35	GY	388	Secondary Radio Receiver Right Audio Signal 2	I	—
5	0.5	D-GN	5060	Low Speed GMLAN Serial Data	I	—
6 - 8	—	—	—	Not Occupied	—	—
9	0.8	BK / WH	351	Signal Ground	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	Bare	1573	Front Audio Low Reference	I	—
12 - 15	—	—	—	Not Occupied	—	—
16	0.8	RD / WH	340	Battery Positive Voltage	I	—

A23D Door Latch Assembly - Driver X1



684948

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15354716
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed(BK)

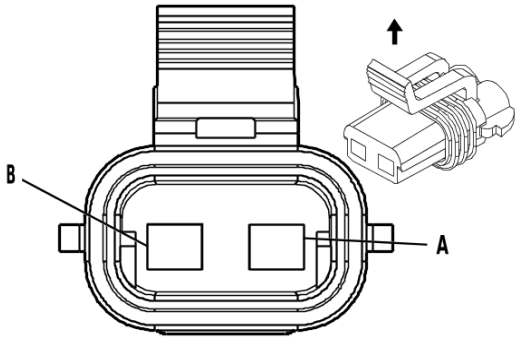
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

A23D Door Latch Assembly - Driver X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	TN	126	Left Front Door Open Switch Signal	I	—
B	0.35	GY / BK	745	Left Front Door Ajar Switch Signal	I	—
C	—	—	—	Not Occupied	—	—
D	0.35	BK	450	Ground	I	—

A23D Door Latch Assembly - Driver X2



68721

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

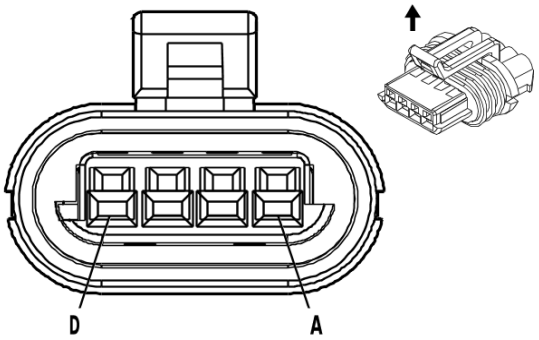
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

A23D Door Latch Assembly - Driver X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	694	Driver Door Lock Actuator Unlock Control	I	—
B	0.8	GY	295	Door Lock Actuator Lock Control	I	—

A23P Door Latch Assembly - Passenger X1



684948

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 15354716
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed(BK)

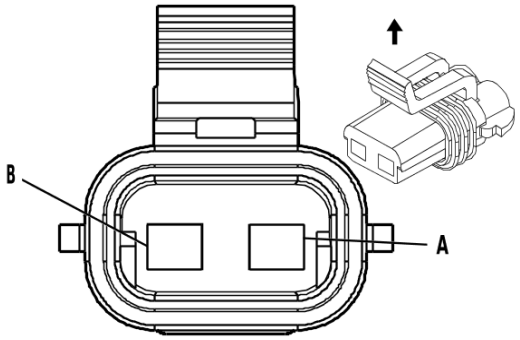
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

A23P Door Latch Assembly - Passenger X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	1850	Ground	I	—
B	—	—	—	Not Occupied	—	—
C	0.35	TN / WH	746	Right Front Door Ajar Switch Signal	I	—
D	0.35	L-GN	1177	Right Front Door Open Switch Signal	I	—

A23P Door Latch Assembly - Passenger X2



68721

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

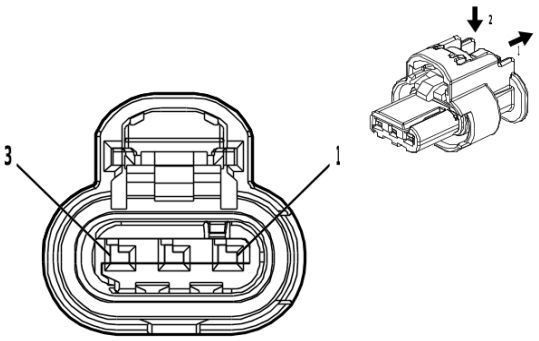
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

A23P Door Latch Assembly - Passenger X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	0.8	GY	295	Door Lock Actuator Lock Control	I	—

B1 A/C Refrigerant Pressure Sensor



4581126

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33358800
Service Connector: 86792094
Description: 3-Way F 1.2 MCON-CB Series, Sealed(BK)

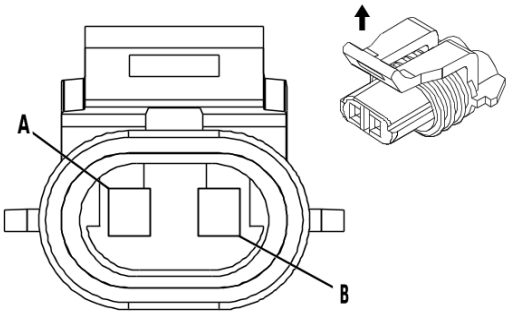
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B1 A/C Refrigerant Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
2	0.5	L-GN	380	A/C Refrigerant Pressure Sensor Signal	I	—
3	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—

B1B A/C Low Side Pressure Switch



537107

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 12052644
Service Connector: 19368034
Description: 2-Way F 150 Metri-Pack Series, Sealed(GY)

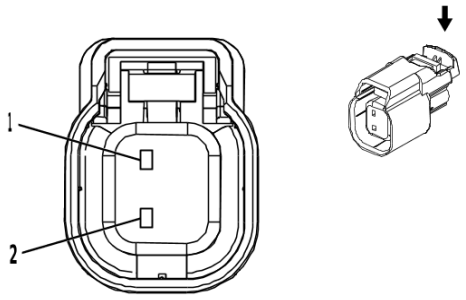
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B1B A/C Low Side Pressure Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BN	66	A/C Request Signal	I	—
B	0.5	BN / WH	66	A/C Request Signal	I	—

B5LF Wheel Speed Sensor - Left Front



2792100

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13828712
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

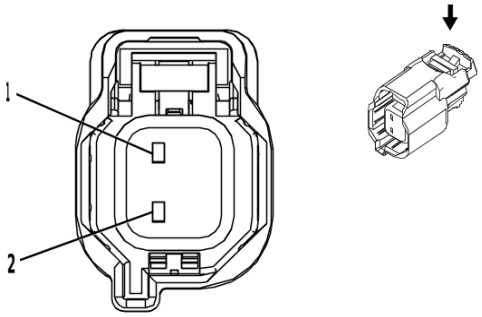
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5LF Wheel Speed Sensor - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	7064	Left Front Wheel Speed Sensor Control	I	—
2	0.5	GY	830	Left Front Wheel Speed Sensor Signal	I	—

B5LR Wheel Speed Sensor - Left Rear (-R04)



3651383

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15540141
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(L-GY)

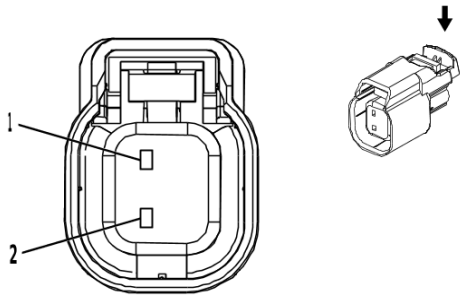
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5LR Wheel Speed Sensor - Left Rear (-R04)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BK	7127	Left Rear Wheel Speed Sensor Control	I	—
2	0.5	D-BU	884	Left Rear Wheel Speed Sensor Signal	I	—

B5LR Wheel Speed Sensor - Left Rear (R04)



2792100

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13828712
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

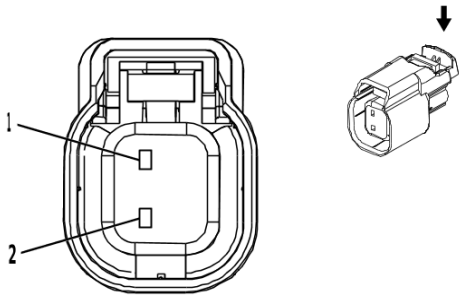
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5LR Wheel Speed Sensor - Left Rear (R04)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BK	7127	Left Rear Wheel Speed Sensor Control	I	—
2	0.5	D-BU	884	Left Rear Wheel Speed Sensor Signal	I	—

B5RF Wheel Speed Sensor - Right Front



2792100

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13828712
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

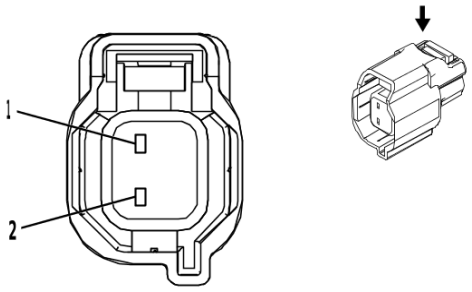
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5RF Wheel Speed Sensor - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / BN	7065	Right Front Wheel Speed Sensor Control	I	—
2	0.5	YE	872	Right Front Wheel Speed Sensor Signal	I	—

B5RR Wheel Speed Sensor - Right Rear (-R04)



2900396

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15503634
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(L-GY)

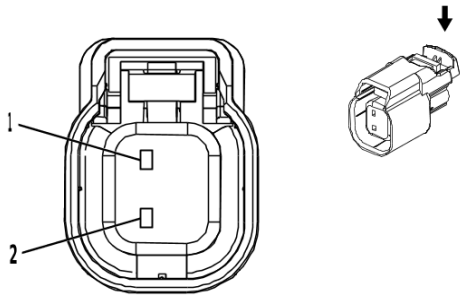
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5RR Wheel Speed Sensor - Right Rear (-R04)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	VT	882	Right Rear Wheel Speed Sensor Signal	I	—

B5RR Wheel Speed Sensor - Right Rear (R04)



2792100

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13828712
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

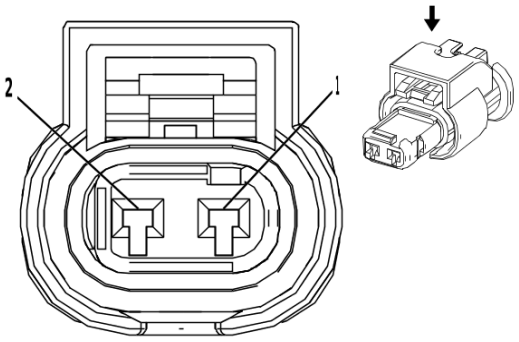
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B5RR Wheel Speed Sensor - Right Rear (R04)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	VT	882	Right Rear Wheel Speed Sensor Signal	I	—

B9 Ambient Air Temperature Sensor (LV1/L8T)



2474752

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 13586143
Service Connector: Not Available
Description: 2-Way F 1.2 MCON Series, Sealed(BK)

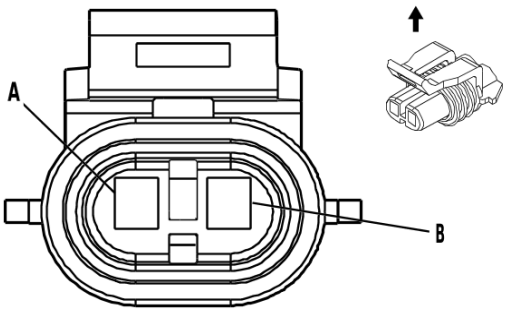
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B9 Ambient Air Temperature Sensor (LV1/L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BU / GY	636	Ambient Air Temperature Sensor Signal	I	—
2	—	BK / GN	580	Engine Control Sensors Low Reference 2	I	—

B9 Ambient Air Temperature Sensor (UFA)



684793

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 12052642
Service Connector: 12101856
Description: 2-Way F 150 Metri-Pack Series, Sealed(L-GN)

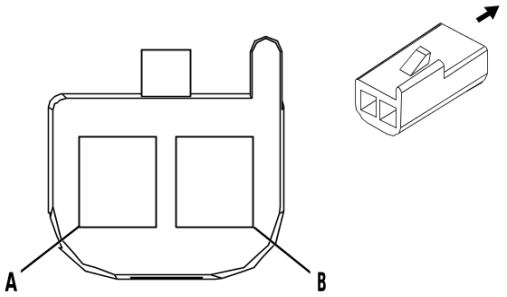
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B9 Ambient Air Temperature Sensor (UFA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU / GY	636	Ambient Air Temperature Sensor Signal	I	—
B	0.5	BK / D-BU	61	Ambient Air Temperature Sensor Low Reference	I	—

B10 Ambient Light Sensor



82383

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12047662
Service Connector: 12085535
Description: 2-Way F 150 Metri-Pack Series(BK)

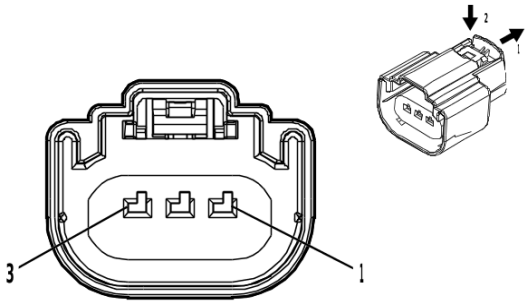
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B10 Ambient Light Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	WH	278	Ambient Light Sensor Signal	I	—
B	0.35	BK / WH	351	Signal Ground	I	—

B18 Battery Current Sensor



4569745

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 1.5 MX Series, Sealed(BK)

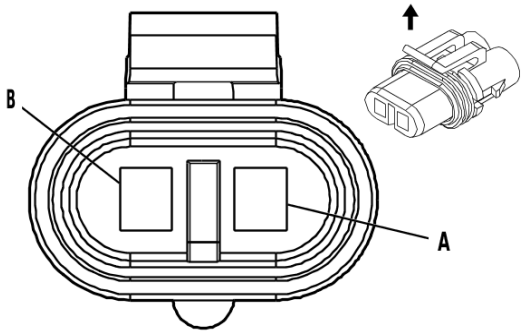
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B18 Battery Current Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU / VT	5076	Current Sensor Voltage Reference	I	—
2	0.5	BK / VT	5077	Current Sensor Low Reference	I	—
3	0.5	WH / YE	5075	Current Sensor Signal	I	—

B19A Brake Booster Fluid Pressure Alarm Switch



646148

Connector Part Information

Harness Type: Brake Fluid Level Indicator Wiring Harness
OEM Connector: 12020599
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

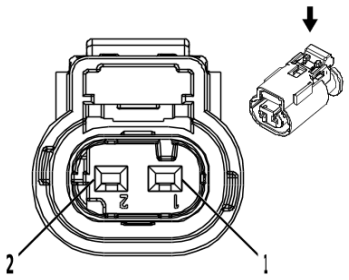
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

B19A Brake Booster Fluid Pressure Alarm Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	TN / WH	33	Brake Warning Indicator Control	I	—
B	0.5	L-BU / BK	1928	Brake Booster Fluid Flow Alarm Switch Signal	I	—

B20 Brake Fluid Level Switch



2717066

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed(BK)

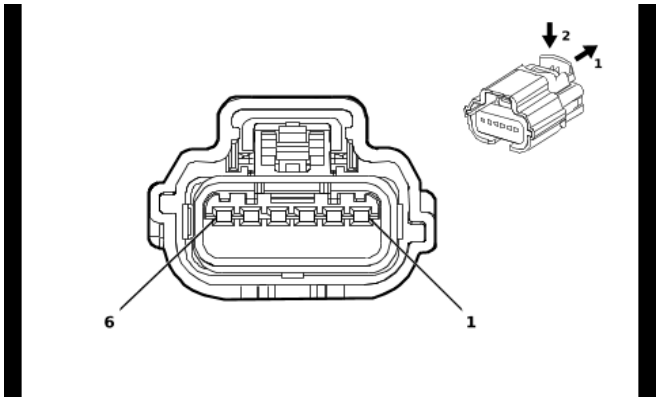
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B20 Brake Fluid Level Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK / WH	1551	Signal Ground	I	—
2	0.75	L-GN / GY	333	Brake Fluid Level Signal	I	—

B22 Brake Pedal Position Sensor



4773396

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35199160
Service Connector: 84683650
Description: 6-Way F 64 Series, Sealed(NA)

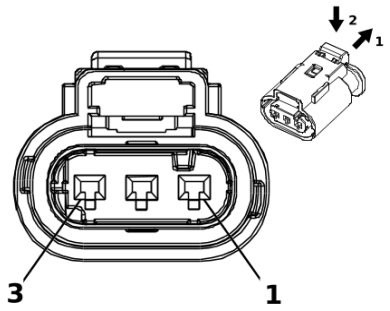
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B22 Brake Pedal Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	5382	Brake Position Sensor Low Reference	I	—
2	0.5	GY	5381	Brake Position Sensor 5V Reference	I	—
3	0.5	TN	5380	Brake Position Sensor Signal	I	—
4	0.5	YE	5361	Brake Apply Sensor Signal	I	—
5	0.5	BN	5360	Brake Apply Sensor Low Reference	I	—
6	0.5	WH	5359	Brake Apply Sensor Control	I	—

B23 Camshaft Position Sensor



2717069

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper Wiring Harness
OEM Connector: 13503570
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

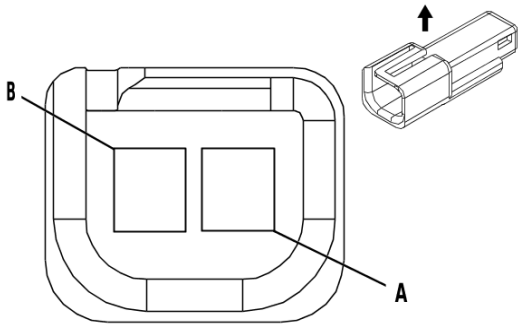
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B23 Camshaft Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY / D-BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	I	—
2	—	BK / L-GN	5301	Intake Camshaft Position Sensor Low Reference 1	I	—
3	—	YE / VT	5275	Intake Camshaft Position Sensor 1	I	—

B24 Mobile Telephone Microphone



35441

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series(BK)

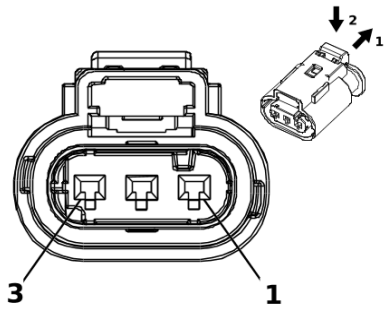
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-3 (GY)	No Tool Required

B24 Mobile Telephone Microphone

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-GN	654	Cellular Telephone Microphone Low Reference	I	—
B	0.8	GY	655	Cellular Telephone Microphone Signal	I	—

B26 Crankshaft Position Sensor



2717069

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13763990
Service Connector: 84601390
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

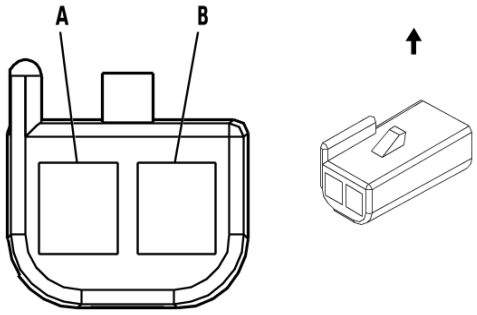
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B26 Crankshaft Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN	6271	Crankshaft Position Sensor Signal	I	—
2	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
3	0.5	VT / D-BU	6270	Crankshaft Position Sensor Voltage	I	—

B28F Door Ajar Switch - Right Sliding



35451

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12059251
Service Connector: 12101848
Description: 2-Way F 150 Metri-Pack Series(RD)

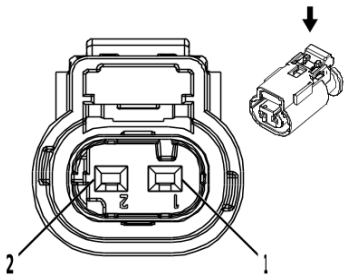
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B28F Door Ajar Switch - Right Sliding

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	1850	Ground	I	—
B	0.35	YE / BK	1181	Right Rear Door Open Switch Signal	I	—

B34 Engine Coolant Temperature Sensor (L8T)



2717066

Connector Part Information

Harness Type: Engine Coolant Temperature Sensor Wiring Harness
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed(BK)

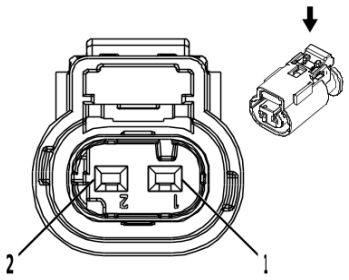
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B34 Engine Coolant Temperature Sensor (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	D-BU	410	Engine Coolant Temperature Sensor Signal	I	—
2	—	BK / YE	548	Engine Control Sensors Low Reference 1	I	—

B34 Engine Coolant Temperature Sensor (LV1)



2717066

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed(BK)

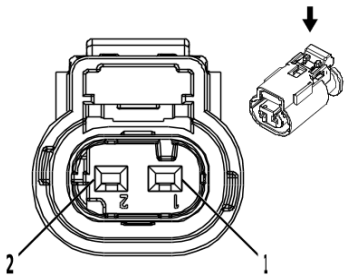
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B34 Engine Coolant Temperature Sensor (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	410	Engine Coolant Temperature Sensor Signal	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—

B35 Engine Oil Level Switch (L8T)



2717066

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed(BK)

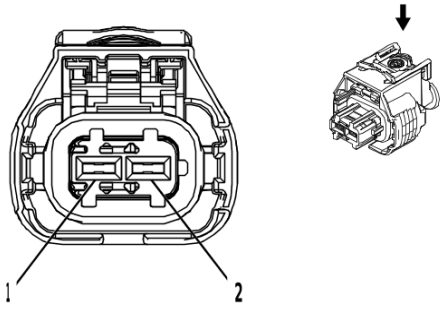
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B35 Engine Oil Level Switch (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / L-GN	1174	Oil Level Switch Signal	I	—
2	0.75	BK / WH	1551	Signal Ground	I	—

B35 Engine Oil Level Switch (LV1)



2577394

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed(BK)

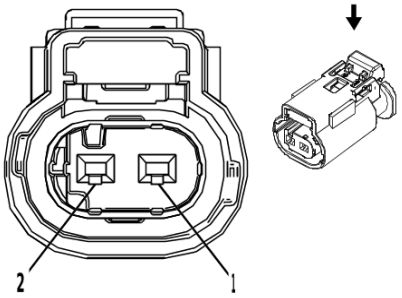
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

B35 Engine Oil Level Switch (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / L-GN	1174	Oil Level Switch Signal	I	—
2	0.75	BK / WH	1551	Signal Ground	I	—

B36 Engine Oil Temperature Sensor



2830969

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed(D-GY)

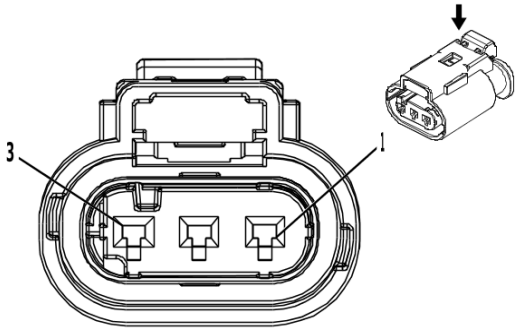
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B36 Engine Oil Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / D-BU	357	Oil Temperature Sensor Signal	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—

B37B Engine Oil Pressure Sensor



3240107

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13889776
Service Connector: 19301717
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

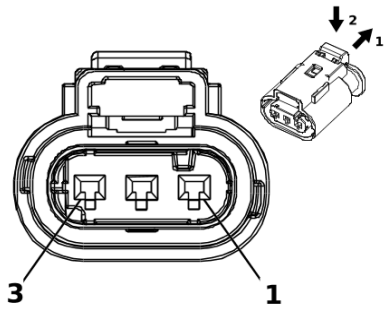
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B37B Engine Oil Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / BN	331	Oil Pressure Sensor Signal	I	—
2	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
3	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—

B47 Fuel Pressure Sensor (-Cutaway Chassis)



2717069

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13763990
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

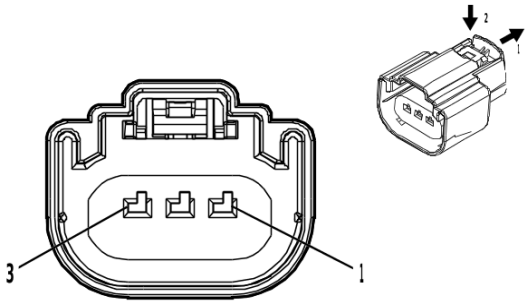
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B47 Fuel Pressure Sensor (-Cutaway Chassis)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—
2	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	I	—
3	0.5	D-BU / WH	7446	Fuel Pressure Sensor Signal	I	—

B47 Fuel Pressure Sensor (Cutaway Chassis)



4569745

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343869
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.5 MX Series, Sealed(BK)

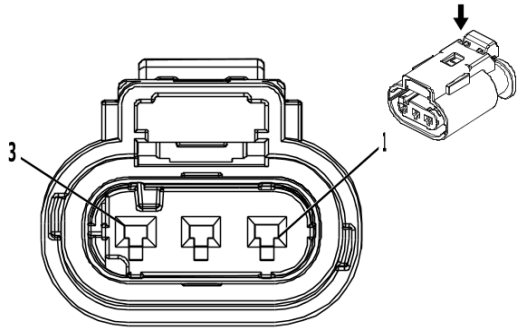
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

B47 Fuel Pressure Sensor (Cutaway Chassis)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU / WH	7446	Fuel Pressure Sensor Signal	I	—
2	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	I	—
3	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—

B47B Fuel Rail Pressure Sensor



3240107

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 10010344
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed(BK)

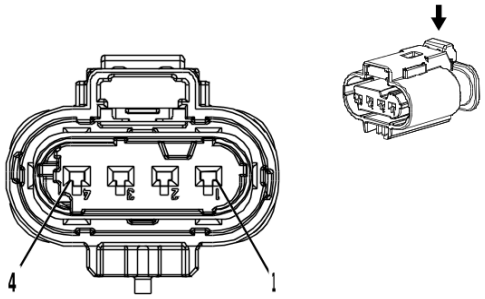
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B47B Fuel Rail Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
2	—	D-BU / WH	2918	Fuel Rail Pressure Sensor Signal	I	—
3	—	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—

B52C Heated Oxygen Sensor - Bank 1 Sensor 1



4381050

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed(BK)

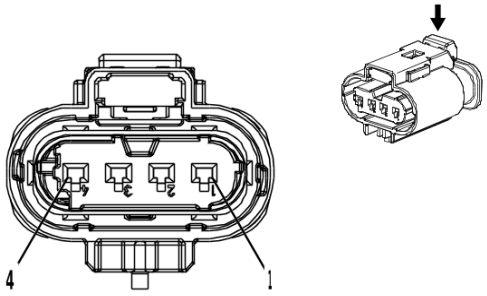
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52C Heated Oxygen Sensor - Bank 1 Sensor 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	I	—
2	0.5	VT / D-BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
3	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	I	—
4	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	I	—

B52D Heated Oxygen Sensor - Bank 1 Sensor 2



4036370

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed(GY)

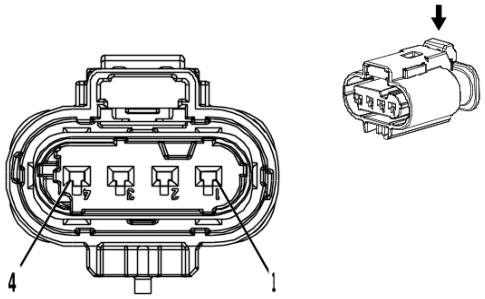
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52D Heated Oxygen Sensor - Bank 1 Sensor 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	I	—
2	0.5	VT / D-BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—
3	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	I	—
4	0.5	VT / D-BU	3120	HO2S High Signal Bank 1 Sensor 2	I	—

B52E Heated Oxygen Sensor - Bank 2 Sensor 1



4381050

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed(BK)

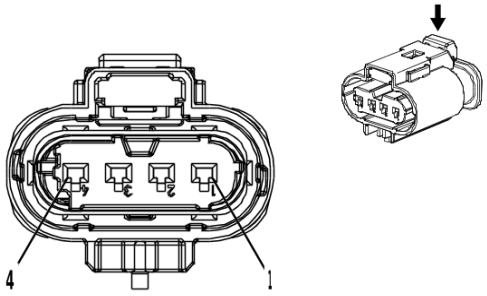
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52E Heated Oxygen Sensor - Bank 2 Sensor 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	I	—
2	0.5	VT / D-BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
3	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	I	—
4	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	I	—

B52F Heated Oxygen Sensor - Bank 2 Sensor 2



4036370

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed(GY)

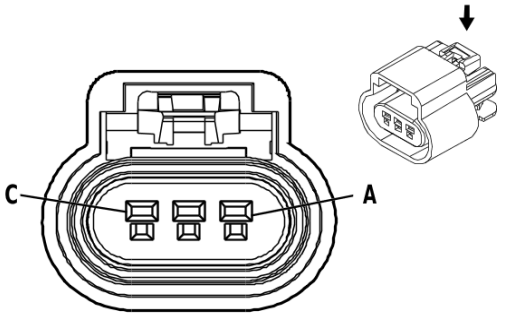
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B52F Heated Oxygen Sensor - Bank 2 Sensor 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	I	—
2	0.5	VT / D-BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—
3	0.5	YE / D-BU	3221	HO2S Low Signal Bank 2 Sensor 2	I	—
4	0.5	VT / L-GN	3220	HO2S High Signal Bank 2 Sensor 2	I	—

B55 Engine Hood Switch



646415

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 13519047
Service Connector: 19368886
Description: 3-Way F 150 GT Series, Sealed(BK)

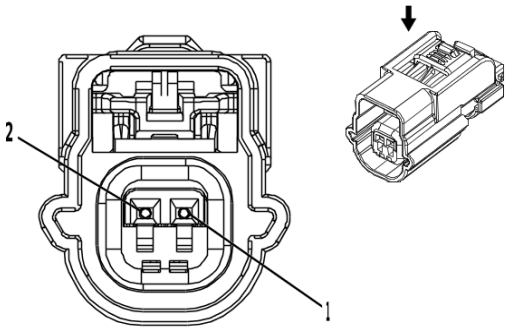
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

B55 Engine Hood Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BN / GN	109	Hood Ajar Switch Signal	I	—
B	0.5	PU / BN	5531	Hood Closed Switch Signal	I	—
C	0.5	BK	250	Ground	I	—

B59 Front Impact Sensor



3556418

Connector Part Information

Harness Type: Air Bag Jumper Wiring Harness
OEM Connector: 13593078
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed(GY)

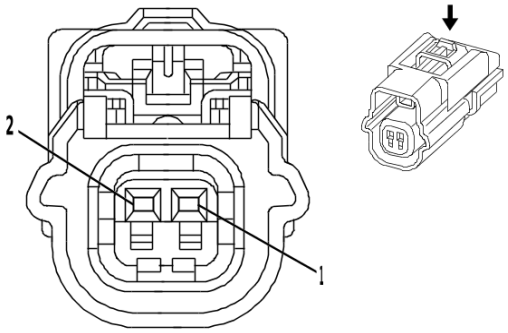
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B59 Front Impact Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN / WH	6618	Front Middle Impact Discriminating Sensor Signal	I	—
2	0.5	D-BU / WH	6619	Front Middle Impact Discriminating Sensor Low Reference	I	—

B63LF Side Impact Sensor - Left Front



1664592

Connector Part Information

Harness Type: Airbag Wiring Harness
OEM Connector: 13528494
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Kaizen Series, Sealed(BK)

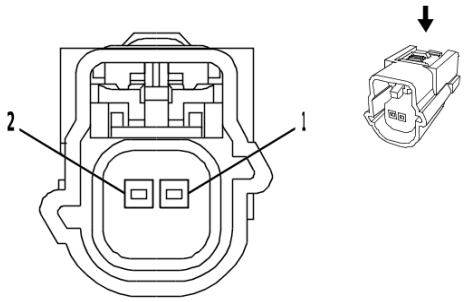
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B63LF Side Impact Sensor - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	2132	Left Front Side Impact Sensor Signal	I	—
2	0.5	PU / WH	6628	Left Front Side Impact Sensor Low Reference	I	—

B63LR Side Impact Sensor - Left Rear



2179777

Connector Part Information

Harness Type: Airbag Wiring Harness
OEM Connector: 13610095
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed(GY)

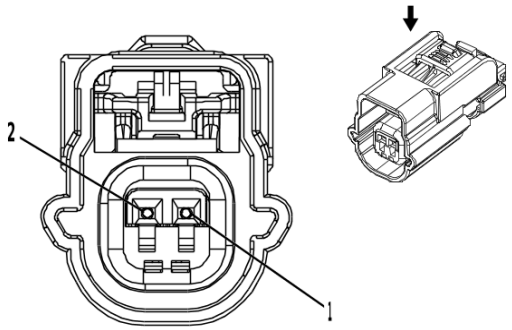
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B63LR Side Impact Sensor - Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-GN / WH	6620	Left Middle Side Impact Sensor Signal	I	—
2	0.5	GY / BK	6621	Left Middle Side Impact Sensor Low Reference	I	—

B63RF Side Impact Sensor - Right Front



3556418

Connector Part Information

Harness Type: Side Impact Sensor - Right Front Jumper
OEM Connector: 89047492
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed(GY)

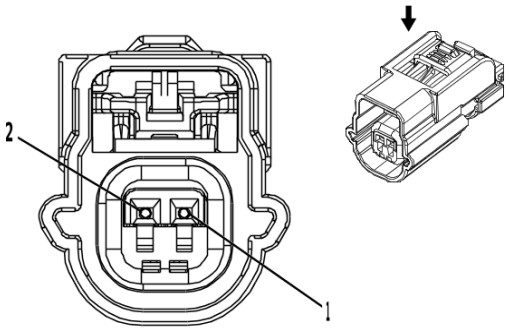
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B63RF Side Impact Sensor - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	2134	Right Front Side Impact Sensor Signal	I	—
2	—	VT / WH	6629	Right Front Side Impact Sensor Low Reference	I	—

B63RR Side Impact Sensor - Right Rear (E24)



3556418

Connector Part Information

Harness Type: Airbag Wiring Harness
OEM Connector: 13593078
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed(GY)

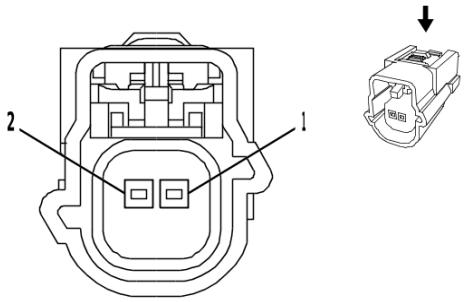
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B63RR Side Impact Sensor - Right Rear (E24)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-BU / BK	6624	Right Middle Side Impact Sensor Signal	I	—
2	0.5	L-GN / WH	6625	Right Middle Side Impact Sensor Low Reference	I	—

B63RR Side Impact Sensor - Right Rear (YA2)



2179777

Connector Part Information

Harness Type: Airbag Wiring Harness
OEM Connector: 13610095
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed(GY)

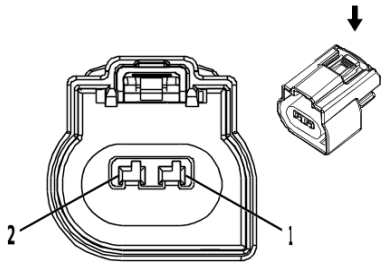
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B63RR Side Impact Sensor - Right Rear (YA2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-BU / BK	6624	Right Middle Side Impact Sensor Signal	I	—
2	0.5	L-GN / WH	6625	Right Middle Side Impact Sensor Low Reference	I	—

B68A Knock Sensor 1



2717073

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 1.5 MX Series, Sealed(BK)

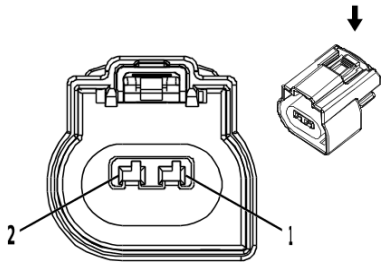
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

B68A Knock Sensor 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / GY	496	Knock Sensor 1 Signal	I	—
2	0.75	BK / YE	1716	Knock Sensor Low Reference 1	I	—

B68B Knock Sensor 2



2717073

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 1.5 MX Series, Sealed(BK)

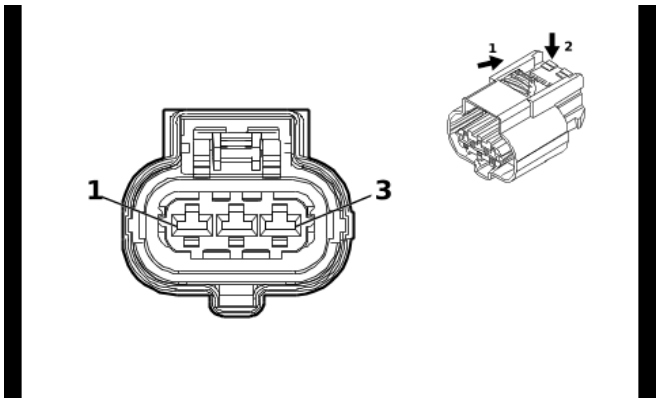
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

B68B Knock Sensor 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH / GY	1876	Knock Sensor 2 Signal	I	—
2	0.75	BK / GY	2303	Knock Sensor Low Reference 2	I	—

B74 Manifold Absolute Pressure Sensor



4900977

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35133579
Service Connector: 84815530
Description: 3-Way F 2.8 CTS Series, Sealed(BK)

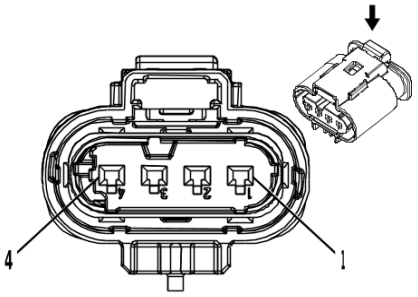
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

B74 Manifold Absolute Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
2	0.5	BK / L-GN	469	Manifold Absolute Pressure Sensor Low Reference	I	—
3	0.5	L-GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—

B75C Multifunction Intake Air Sensor



2717096

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13815348
Service Connector: 13587298
Description: 4-Way F 1.2 Multilock Series, Sealed(L-GY)

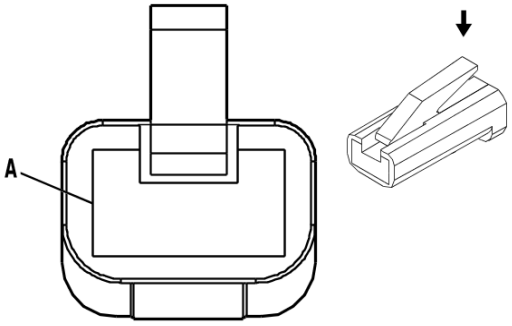
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B75C Multifunction Intake Air Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / D-BU	5294	Powertrain Main Relay Fused Supply Voltage 5	I	—
2	0.5	L-GN / WH	492	Mass Air Flow Sensor Signal	I	—
3	0.5	L-GN / WH	4622	Engine Control Module LIN Bus 2	I	—
4	0.75	BK / WH	1551	Signal Ground	I	—

B80 Park Brake Switch



35348

Connector Part Information

Harness Type: Park Brake Switch Jumper
OEM Connector: 12004267
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 5.6 Series(BK)

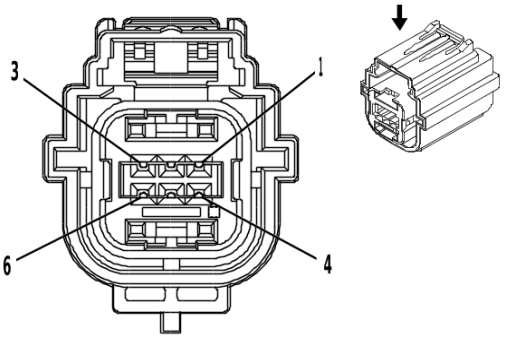
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B80 Park Brake Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-BU	1134	Park Brake Switch Signal	I	—

B87 Rearview Camera (-Cutaway)



2133378

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 13629704
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Series, Sealed(GY)

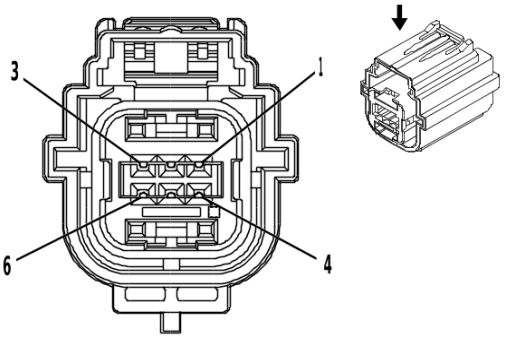
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B87 Rearview Camera (-Cutaway)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	7641	Frontview Camera 2 Signal [+]	I	—
2	0.5	Bare	6799	Camera Shield Ground	I	—
3	0.5	L-GN	24	Backup Lamp Control	I	—
4	0.5	L-BU	7642	Frontview Camera 2 Signal [-]	I	—
5	0.5	BK	351	Signal Ground	I	—
6	0.5	PK	239	Run/Crank Ignition 1 Voltage	I	—

B87 Rearview Camera (Cutaway)



2133378

Connector Part Information

Harness Type: Rearview Camera Wiring Harness
OEM Connector: 13629704
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B87 Rearview Camera (Cutaway)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	7641	Frontview Camera 2 Signal [+]	I	—
2	0.5	Bare	6799	Camera Shield Ground	I	—
3	0.5	L-GN	24	Backup Lamp Control	I	—
4	0.5	L-BU	7642	Frontview Camera 2 Signal [-]	I	—
5	0.5	BK / WH	351	Signal Ground	I	—
6	0.5	PK	239	Run/Crank Ignition 1 Voltage	I	—

B99 Steering Wheel Angle Sensor

—

Connector Part Information

Harness Type: Steering Column
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way

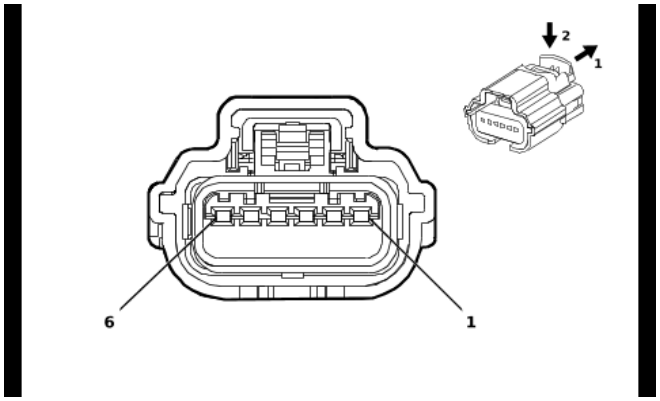
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B99 Steering Wheel Angle Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
2	—	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
3	—	BU / YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
4	—	BU / YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
5	—	L-GN / BN	2087	Multi-axis Acceleration Sensor Supply Voltage	I	—
6	—	BK / WH	351	Signal Ground	I	—

B107 Accelerator Pedal Position Sensor



5157678

Connector Part Information

Harness Type: Accelerator Control Wiring Harness
OEM Connector: 35199156
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 64 Series, Sealed(BK)

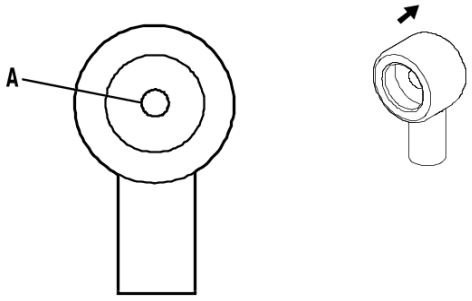
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B107 Accelerator Pedal Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	I	—
2	0.35	YE / WH	1161	Accelerator Pedal Position Signal 1	I	—
3	0.35	BK / D-BU	1271	Accelerator Pedal Position Low Reference 1	I	—
4	0.35	BK / VT	1272	Accelerator Pedal Position Low Reference 2	I	—
5	0.35	L-GN / WH	1162	Accelerator Pedal Position Signal 2	I	—
6	0.35	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	I	—

B133 Brake Booster Fluid Flow Alarm Switch X1



2004808

Connector Part Information

Harness Type: Brake Fluid Level Indicator Wiring Harness
OEM Connector: 6288440
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F Grip Series(BK)

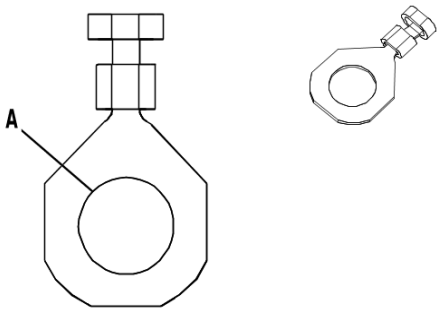
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

B133 Brake Booster Fluid Flow Alarm Switch X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	L-BU / BK	1928	Brake Booster Fluid Flow Alarm Switch Signal	I	—

B133 Brake Booster Fluid Flow Alarm Switch X2



3240148

Connector Part Information

Harness Type: Brake Fluid Level Indicator Wiring Harness
OEM Connector: 12103516
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

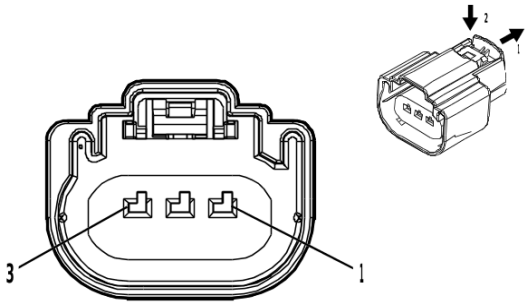
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

B133 Brake Booster Fluid Flow Alarm Switch X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK	350	Ground	I	—

B150 Fuel Tank Pressure Sensor



4589538

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33343864
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.5 MX Series, Sealed(GY)

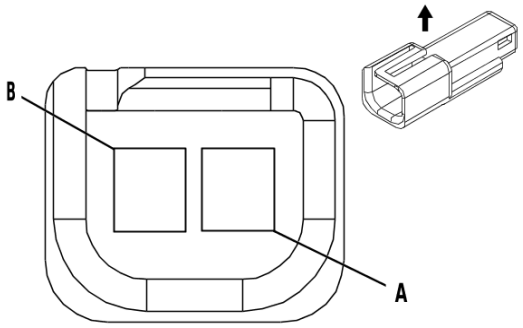
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

B150 Fuel Tank Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU / WH	890	Fuel Tank Pressure Sensor Signal	I	—
2	0.5	BK / BN	6284	Fuel Tank Pressure Sensor Low Reference	I	—
3	0.5	YE / RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—

B153D Seat Belt Buckle - Driver



35441

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 12047663
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series(BK)

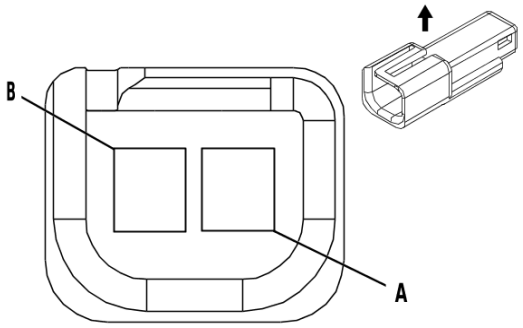
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

B153D Seat Belt Buckle - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	PK	5057	Seat Position Switch Low Reference	I	—
B	—	TN / WH	238	Driver Seat Belt Switch Signal	I	—

B153P Seat Belt Buckle - Passenger



35441

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 12047663
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series(BK)

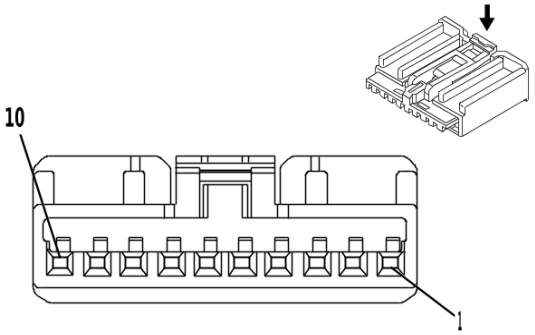
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

B153P Seat Belt Buckle - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	PK	1361	Passenger Seat Belt Switch Low Reference	I	—
B	—	OG	1362	Passenger Seat Belt Switch Signal	I	—

B174W Frontview Camera - Windshield



1862241

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 13574592
Service Connector: 13576634
Description: 10-Way F 0.64 Kaizen Series(BK)

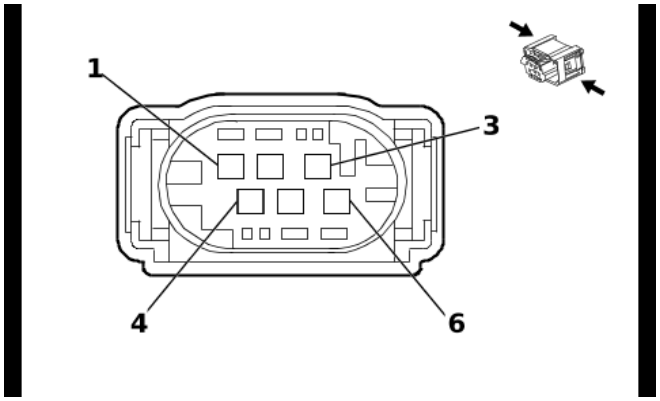
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575742	J-35616-64B (L-BU)	J-38125-215A

B174W Frontview Camera - Windshield

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1850	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	RD / L-GN	3140	Battery Positive Voltage	I	—
4	0.5	WH	3152	Lane Departure Warning Indicator Control	I	—
5 - 6	—	—	—	Not Occupied	—	—
7	0.5	L-GN	5060	Low Speed GMLAN Serial Data	I	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	GY / WH	3153	Lane Departure Warning Disable Switch Signal	I	—

B176 Multi-axis Acceleration Sensor Module



831393

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15355474
Service Connector: 15306420
Description: 6-Way F 0.64 Micro-Quadlock Series, Sealed(BK)

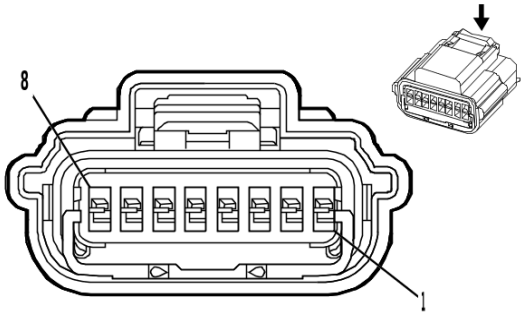
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B176 Multi-axis Acceleration Sensor Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK / BN	6045	Steering Angle Sensor Low Reference	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	D-BU / YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
5	0.5	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
6	0.5	BK / WH	2751	Signal Ground	I	—

B218L Side Object Sensor Module - Left (UFT)



2581486

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 15543347
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 0.64 Series, Sealed(BK)

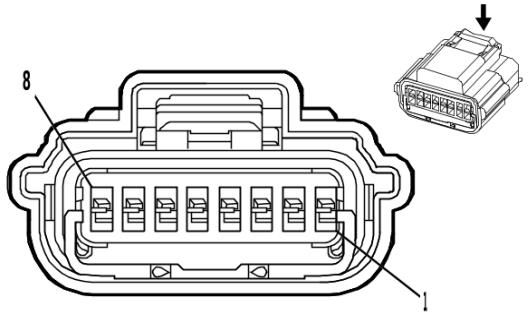
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B218L Side Object Sensor Module - Left (UFT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	L-GN	5060	Low Speed GMLAN Serial Data	I	—
3	—	—	—	Not Occupied	—	—
4	0.5	GY / YE	5853	Driver Side Side Object Detection LED Signal 1	I	—
5	0.5	RD / L-GN	3140	Battery Positive Voltage	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	L-GN / BK	5060	Low Speed GMLAN Serial Data	I	—
8	0.5	BK	2150	Ground	I	—

B218R Side Object Sensor Module - Right (UFT)



2581486

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 15543346
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 0.64 Series, Sealed(BK)

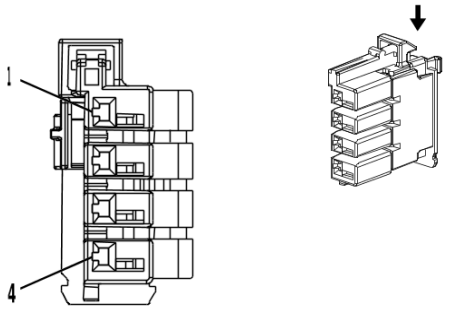
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B218R Side Object Sensor Module - Right (UFT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	BK	2150	Ground	I	—
4	0.5	GY	5861	Passenger Side Object Detection LED Signal 1	I	—
5	0.5	RD / L-GN	3140	Battery Positive Voltage	I	—
6	—	—	—	Not Occupied	—	—
7	0.5	L-GN / BK	5060	Low Speed GMLAN Serial Data	I	—
8	0.5	BK	2150	Ground	I	—

B303 Transmission Range Sensor (M5U)



4364148

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 2289524-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON Series(BN)

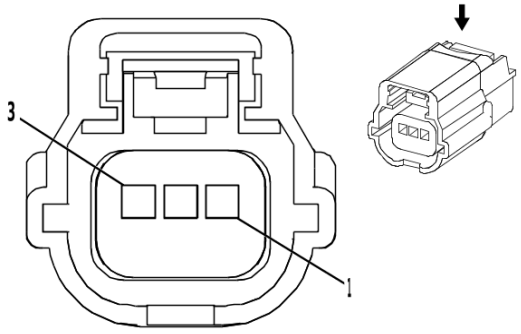
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

B303 Transmission Range Sensor (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GN / YE	3337	Transmission Internal Mode Switch Mode Control Y	I	—
2	—	WH / RD	596	5V Reference	I	—
3	—	BK / GY	3927	Transmission Internal Mode Switch Feedback Signal	I	—
4	—	BU / WH	3338	Transmission Internal Mode Switch Mode Control X	I	—

B306E Parking Assist Sensor - Rear Left Outer (UD7)



1664596

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 13525738
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Series, Sealed(BK)

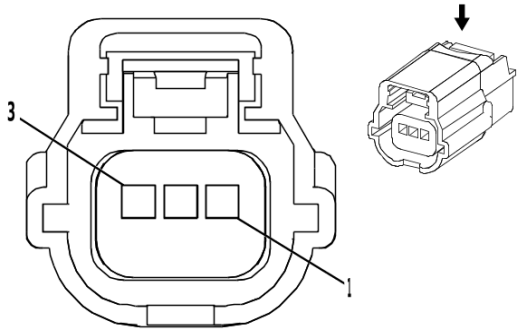
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B306E Parking Assist Sensor - Rear Left Outer (UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	2374	Object Sensor Voltage Reference	I	—
2	0.5	GY	2379	Object Sensor Low Reference	I	—
3	0.5	YE	2375	Left Rear Outer Parking Assist Sensor Signal	I	—

B306F Parking Assist Sensor - Rear Left Middle (UD7)



1664596

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 13525738
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Series, Sealed(BK)

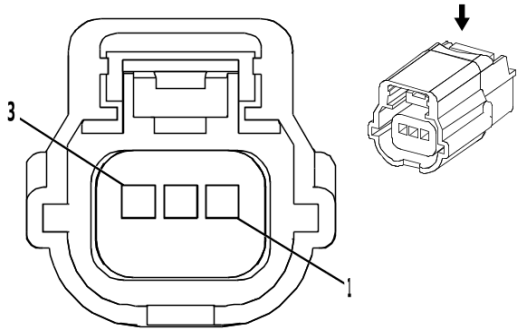
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B306F Parking Assist Sensor - Rear Left Middle (UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	2374	Object Sensor Voltage Reference	I	—
2	0.5	GY	2379	Object Sensor Low Reference	I	—
3	0.5	YE / D-BU	2376	Left Rear Middle Parking Assist Sensor Signal	I	—

B306G Parking Assist Sensor - Rear Right Middle (UD7)



1664596

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 13525738
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Series, Sealed(BK)

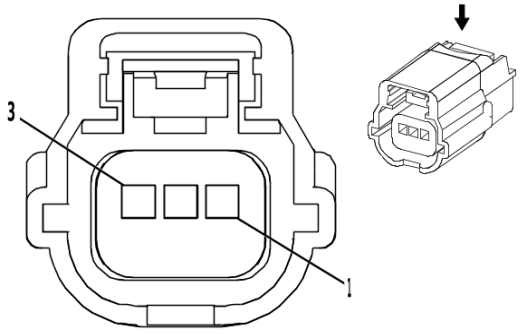
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B306G Parking Assist Sensor - Rear Right Middle (UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	2374	Object Sensor Voltage Reference	I	—
2	0.5	GY	2379	Object Sensor Low Reference	I	—
3	0.5	YE / WH	2377	Right Rear Middle Parking Assist Sensor Signal	I	—

B306H Parking Assist Sensor - Rear Right Outer (UD7)



1664596

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 13525738
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Series, Sealed(BK)

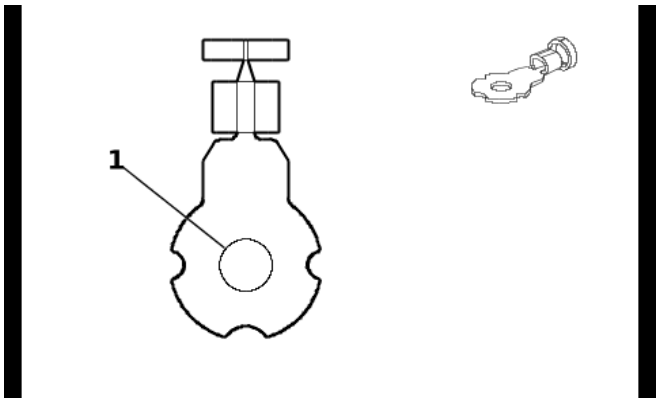
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

B306H Parking Assist Sensor - Rear Right Outer (UD7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	2374	Object Sensor Voltage Reference	I	—
2	0.5	GY	2379	Object Sensor Low Reference	I	—
3	0.5	YE / VT	2378	Right Rear Outer Parking Assist Sensor Signal	I	—

C1 Battery ((-))



5693569

Connector Part Information

Harness Type: Battery Negative Cable
OEM Connector: 12177185
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

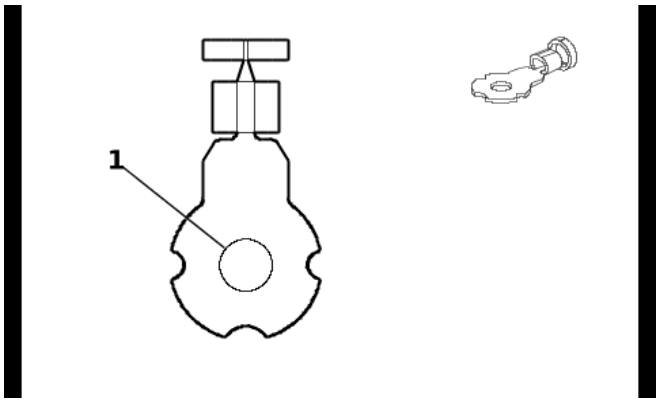
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

C1 Battery ((-))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	19	BK	50	Ground	I	—
	32	BK	50	Ground		—

C1 Battery ((+))



5693569

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 12177185
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

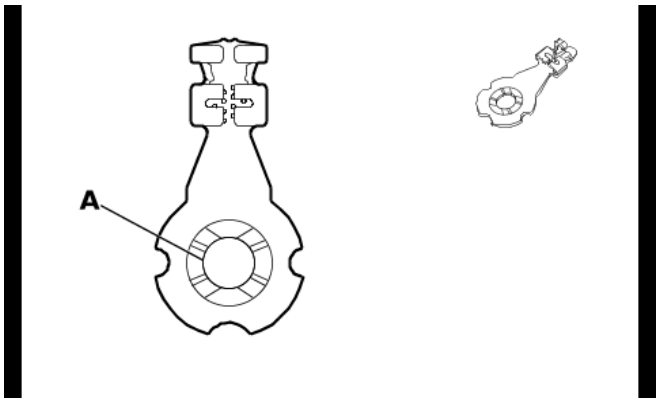
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

C1 Battery ((+))

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	32	RD	1	Unfused Battery Positive Voltage	I	—
	8	RD	1	Unfused Battery Positive Voltage		—

C1B Battery - Auxiliary



6056264

Connector Part Information

Harness Type: Auxiliary Battery Positive Cable
OEM Connector: 12146464
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

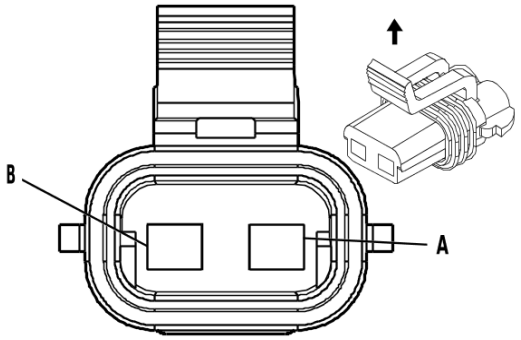
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

C1B Battery - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—

E2LF Side Marker Lamp - Left Front



68721

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 15300027
Service Connector: 12101855
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

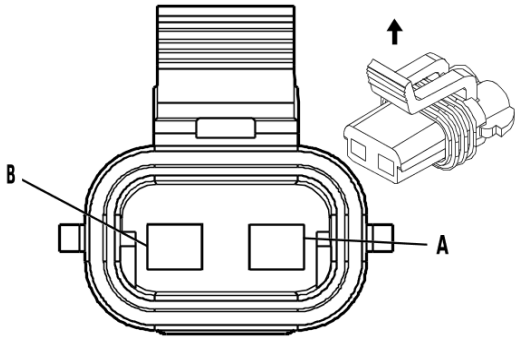
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E2LF Side Marker Lamp - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GY / BN	2309	Front Park Lamp Control	I	—
B	0.5	BK	250	Ground	I	—

E2RF Side Marker Lamp - Right Front



68721

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 15300027
Service Connector: 12101855
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

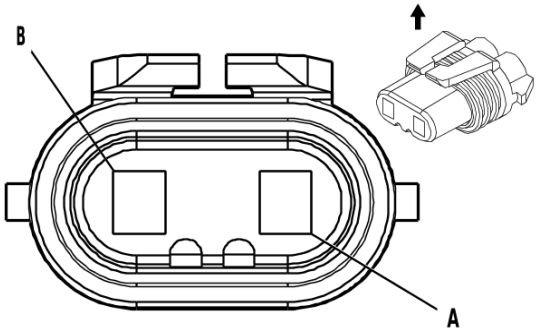
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E2RF Side Marker Lamp - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GY / BN	2309	Front Park Lamp Control	I	—
B	0.5	BK	650	Ground	I	—

E4E Headlamp - Left High Beam



684797

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 12059183
Service Connector: 12101898
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

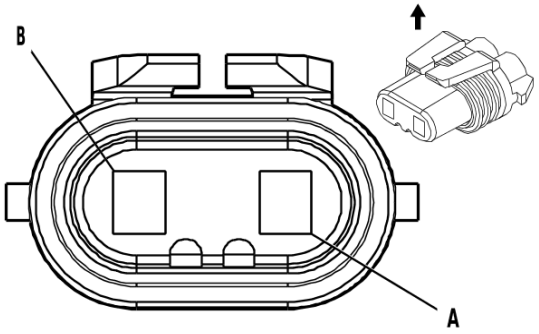
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E4E Headlamp - Left High Beam

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	WH	711	Left Headlamp High Beam Control	I	—
B	0.75	BK	250	Ground	I	—

E4F Headlamp - Right High Beam



684797

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 12059183
Service Connector: 12101898
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

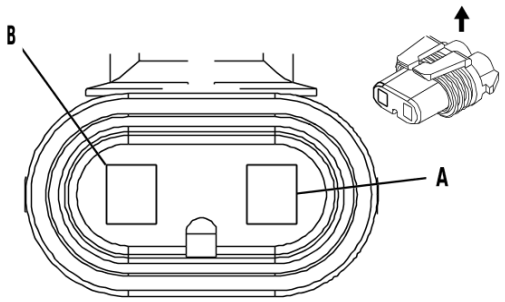
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E4F Headlamp - Right High Beam

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	WH	311	Right Headlamp High Beam Control	I	—
B	0.75	BK	650	Ground	I	—

E4G Headlamp - Left Low Beam



684796

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 12059181
Service Connector: 19301866
Description: 2-Way F 280 Metri-Pack Series, Sealed(GY)

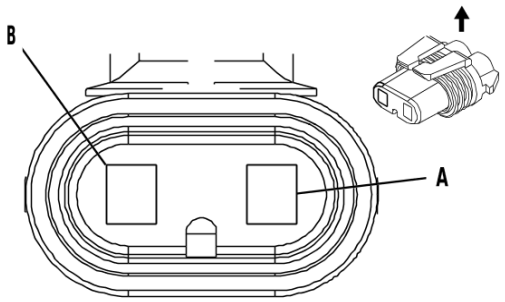
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E4G Headlamp - Left Low Beam

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	YE	712	Left Headlamp Low Beam Control	I	—
B	0.75	BK	250	Ground	I	—

E4H Headlamp - Right Low Beam



684796

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 12059181
Service Connector: 19301866
Description: 2-Way F 280 Metri-Pack Series, Sealed(GY)

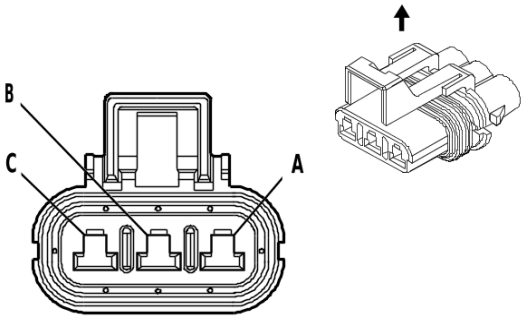
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E4H Headlamp - Right Low Beam

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	YE	312	Right Headlamp Low Beam Control	I	—
B	0.75	BK	650	Ground	I	—

E4N Park/Turn Signal Lamp - Left



847206

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 12040977
Service Connector: 12085492
Description: 3-Way F 280 Metri-Pack Series, Sealed(BK)

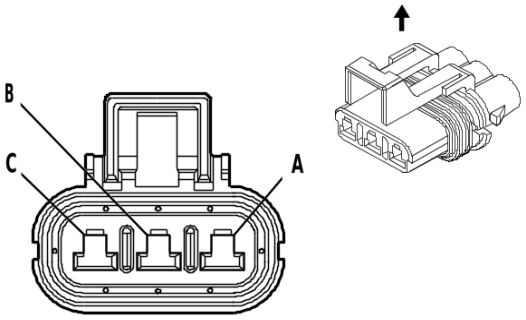
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E4N Park/Turn Signal Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	L-BU / WH	1314	Left Front Turn Signal Lamp Control	I	—
B	0.5	GY / BN	2309	Front Park Lamp Control	I	—
C	0.5	BK	250	Ground	I	—

E4P Park/Turn Signal Lamp - Right



847206

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 12040977
Service Connector: 12085492
Description: 3-Way F 280 Metri-Pack Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

E4P Park/Turn Signal Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU / WH	1315	Right Front Turn Signal Lamp Control	I	—
B	0.5	GY / BN	2309	Front Park Lamp Control	I	—
C	0.5	BK	650	Ground	I	—

E5A Backup Lamp - Left

—

Connector Part Information

Harness Type: Tail Lamp Wiring Harness
OEM Connector: EEM0274
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E5A Backup Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-GN	24	Backup Lamp Control	I	—
G	—	BK	850	Ground	I	—

E5B Backup Lamp - Right

—

Connector Part Information

Harness Type: Tail Lamp Wiring Harness
OEM Connector: EEM0274
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E5B Backup Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-GN	24	Backup Lamp Control	I	—
G	—	BK	1050	Ground	I	—

E5S Tail/Stop and Turn Signal Lamp - Left

—

Connector Part Information

Harness Type: Tail Lamp Wiring Harness
OEM Connector: EEM0275
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E5S Tail/Stop and Turn Signal Lamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BN	2509	Left Rear Park Lamp Control	I	—
B	—	BN	2509	Left Rear Park Lamp Control	I	—
G	—	BK	850	Ground	I	—

E5T Tail/Stop and Turn Signal Lamp - Right

—

Connector Part Information

Harness Type: Tail Lamp Wiring Harness
OEM Connector: EEM0275
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

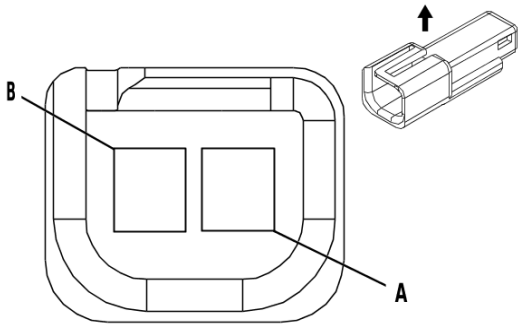
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E5T Tail/Stop and Turn Signal Lamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	— —	D-GN BN	619 2609	Right Rear Turn Signal Lamp Control Right Rear Park Lamp Control	I I	— PASSENGER/ CARGO
B	—	BN	2609	Right Rear Park Lamp Control	I	—
G	—	BK	1050	Ground	I	—

E6 Center High Mounted Stop Lamp



35441

Connector Part Information

Harness Type: Center High Mounted Stop Lamp
OEM Connector: 12047663
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series(BK)

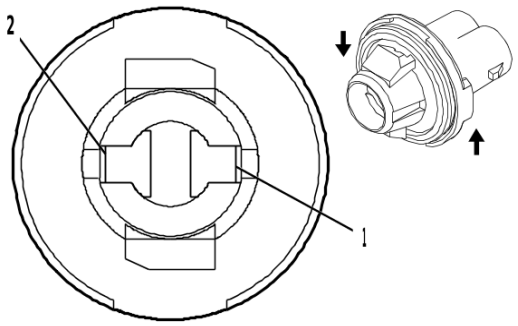
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E6 Center High Mounted Stop Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-BU	1320	Center High Mounted Stop Lamp Control 2	I	—
B	—	BK	850	Ground	I	—

E7 License Plate Lamp



5153536

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2(D-GY)

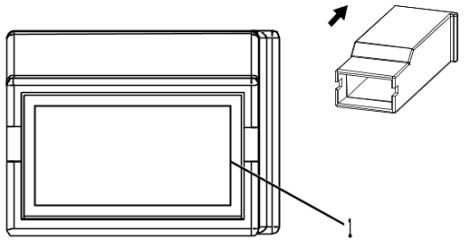
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

E7 License Plate Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	2509	Left Rear Park Lamp Control	I	—
2	0.5	BK	1050	Ground	I	—

E18L Rear Defogger Grid - Left X1



2500421

Connector Part Information

Harness Type: Rear Window Defogger Wiring Harness
OEM Connector: 12103107
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Positive Lock Series(BK)

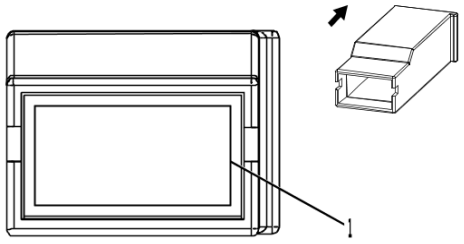
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

E18L Rear Defogger Grid - Left X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
A	5	PU	293	Rear Defogger Grid Control	I	—

E18L Rear Defogger Grid - Left X2



2500421

Connector Part Information

Harness Type: Rear Window Defogger Wiring Harness
OEM Connector: 12103107
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Positive Lock Series(BK)

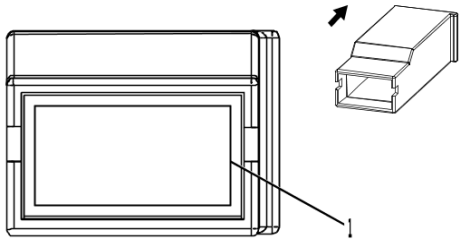
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

E18L Rear Defogger Grid - Left X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	BK	850	Ground	I	—

E18R Rear Defogger Grid - Right X1



2500421

Connector Part Information

Harness Type: Rear Window Defogger Wiring Harness
OEM Connector: 12103107
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Positive Lock Series(BK)

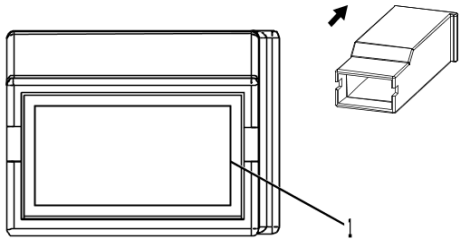
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

E18R Rear Defogger Grid - Right X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
A	5	PU	293	Rear Defogger Grid Control	I	—

E18R Rear Defogger Grid - Right X2



2500421

Connector Part Information

Harness Type: Rear Window Defogger Wiring Harness
OEM Connector: 12103107
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Positive Lock Series(BK)

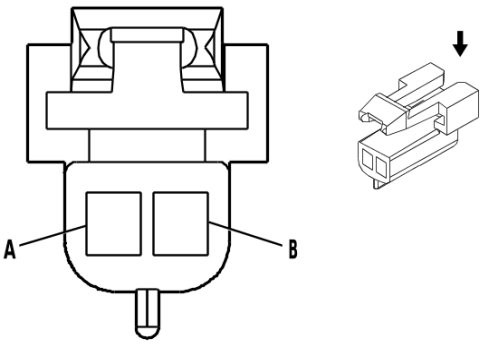
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

E18R Rear Defogger Grid - Right X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	BK	1050	Ground	I	—

E21A Fluorescent Work Lamp - Right Access Panel



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

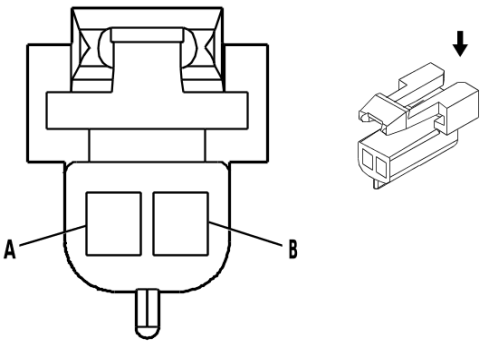
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E21A Fluorescent Work Lamp - Right Access Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	D-BU / WH	149	Courtesy Lamp Control	I	—
B	—	BK	150	Ground	I	—

E21F Fluorescent Work Lamp - Front Cargo



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

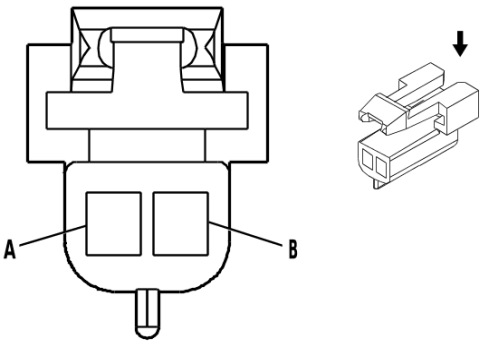
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E21F Fluorescent Work Lamp - Front Cargo

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	D-BU / WH	149	Courtesy Lamp Control	I	—
B	—	BK	150	Ground	I	—

E21LF Fluorescent Work Lamp - Left Front Access Panel



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

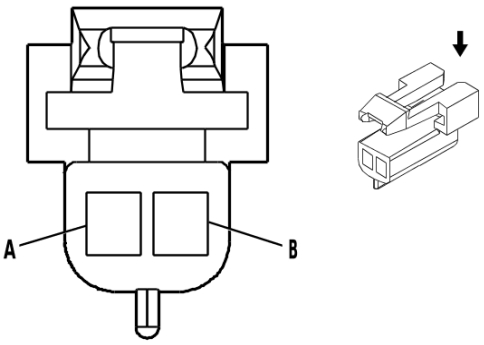
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E21LF Fluorescent Work Lamp - Left Front Access Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	D-BU / WH	149	Courtesy Lamp Control	I	—
B	—	BK	150	Ground	I	—

E21LR Fluorescent Work Lamp - Left Rear Access Panel



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

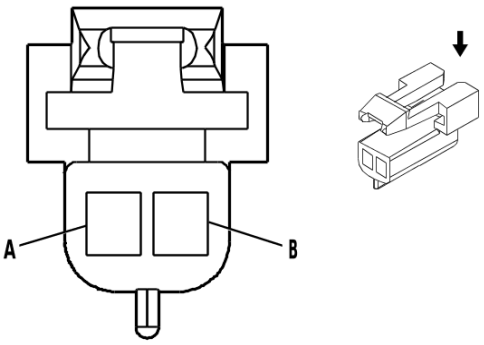
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E21LR Fluorescent Work Lamp - Left Rear Access Panel

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	D-BU / WH	149	Courtesy Lamp Control	I	—
B	—	BK	150	Ground	I	—

E21R Fluorescent Work Lamp - Rear Cargo



280768

Connector Part Information

Harness Type: Rear Body
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

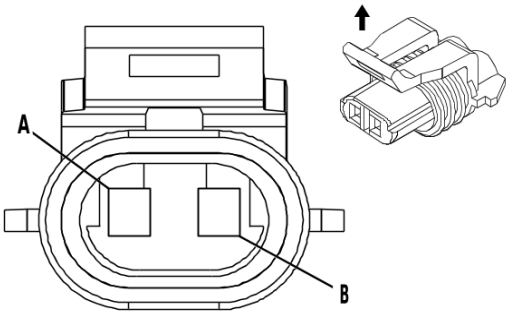
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

E21R Fluorescent Work Lamp - Rear Cargo

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	D-BU / WH	149	Courtesy Lamp Control	I	—
B	—	BK	150	Ground	I	—

E22 Underhood Lamp



537107

Connector Part Information

Harness Type: Underhood Lamp Wiring Harness
OEM Connector: 12052644
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series, Sealed(GY)

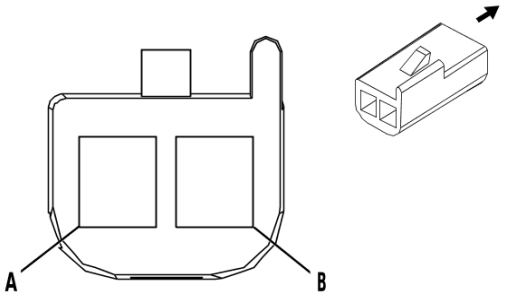
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

E22 Underhood Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	OG	1732	Control Module 12V Reference 3	I	—
B	0.5	BK	1250	Ground	I	—

E36AC Dome Lamp - Left Roof Rail



82383

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12047662
Service Connector: 12085535
Description: 2-Way F 150 Metri-Pack Series(BK)

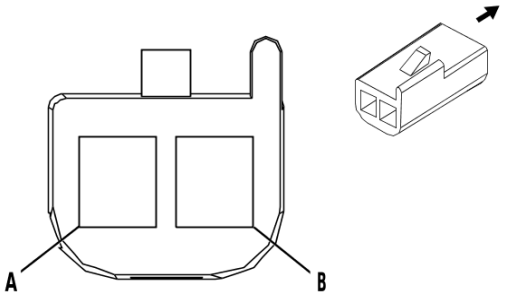
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

E36AC Dome Lamp - Left Roof Rail

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU / WH	149	Courtesy Lamp Control	I	—
B	0.8	BK	850	Ground	I	—

E36AD Dome Lamp - Right Roof Rail



82383

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12047662
Service Connector: 12085535
Description: 2-Way F 150 Metri-Pack Series(BK)

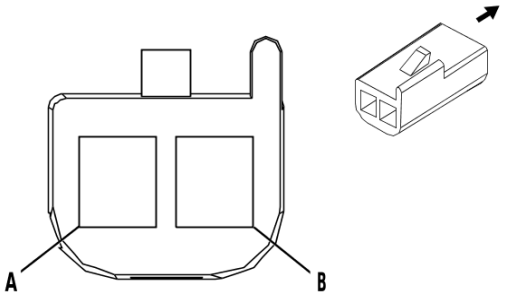
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

E36AD Dome Lamp - Right Roof Rail

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU / WH	149	Courtesy Lamp Control	I	—
B	0.8	BK	850	Ground	I	—

E36AH Dome Lamp



82383

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12047662
Service Connector: 12085535
Description: 2-Way F 150 Metri-Pack Series(BK)

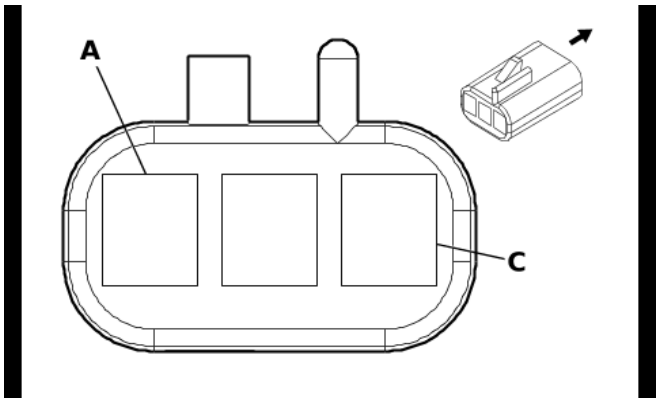
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

E36AH Dome Lamp

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU / WH	149	Courtesy Lamp Control	I	—
B	0.8	BK	850	Ground	I	—

E37F Dome/Reading Lamps - Front



333035

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 12047781
Service Connector: 13586139
Description: 3-Way F 150 Metri-Pack Series(BK)

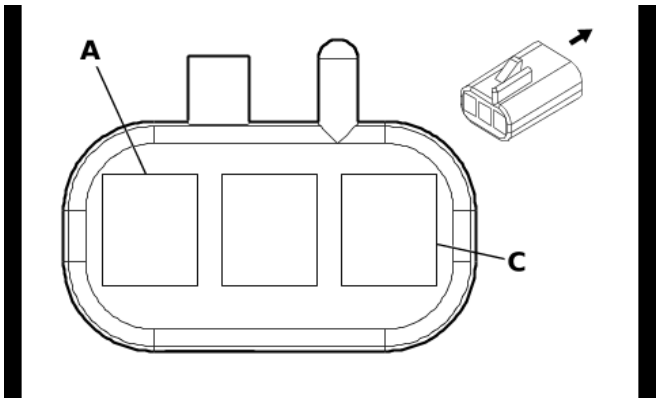
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

E37F Dome/Reading Lamps - Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU / WH	149	Courtesy Lamp Control	I	—
B	1	BK	1850	Ground	I	DH6
	0.8	BK	1850	Ground	I	- DH6
C	0.8	OG	1732	Control Module 12V Reference 3	I	—

E37M Dome/Reading Lamps - Middle



333035

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 12047781
Service Connector: 13586139
Description: 3-Way F 150 Metri-Pack Series(BK)

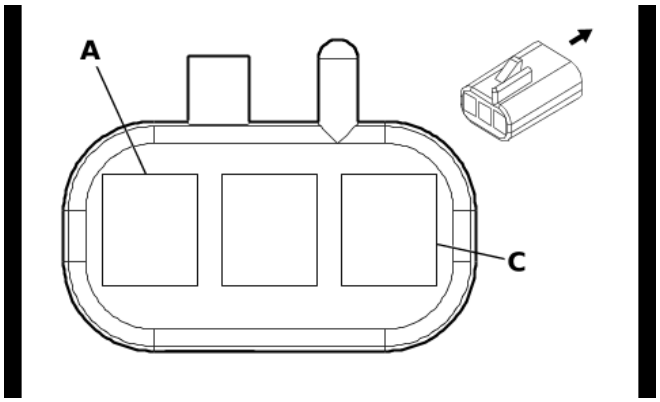
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

E37M Dome/Reading Lamps - Middle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU / WH	149	Courtesy Lamp Control	I	—
B	0.5	BK	1050	Ground	I	—
C	0.8	OG	1732	Control Module 12V Reference 3	I	—

E37R Dome/Reading Lamps - Rear



333035

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 12047781
Service Connector: 13586139
Description: 3-Way F 150 Metri-Pack Series(BK)

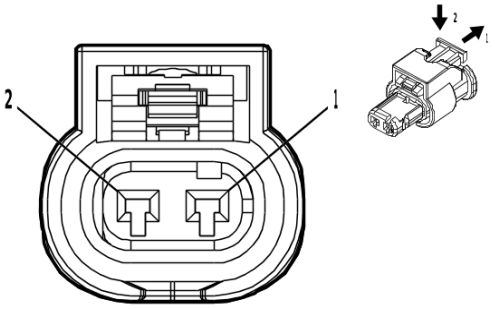
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

E37R Dome/Reading Lamps - Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-BU / WH	149	Courtesy Lamp Control	I	—
B	0.5	BK	1050	Ground	I	—
C	0.8	OG	1732	Control Module 12V Reference 3	I	—

F101 Passenger Instrument Panel Air Bag



2698576

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13863037
Service Connector: 19369032
Description: 2-Way F 1.2 MCON Series, Sealed(YE)

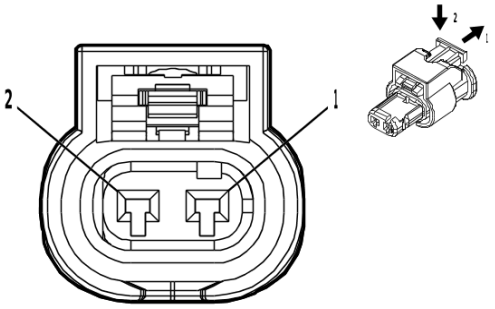
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

F101 Passenger Instrument Panel Air Bag

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	3025	Passenger Instrument Panel Air Bag Stage 1 High Control	I	—
2	0.5	OG	3024	Passenger Instrument Panel Air Bag Stage 1 Low Control	I	—

F105LF Roof Rail Air Bag - Left Front



2698576

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13863037
Service Connector: 19369032
Description: 2-Way F 1.2 MCON Series, Sealed(YE)

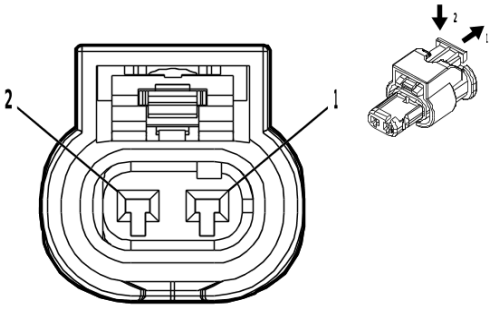
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

F105LF Roof Rail Air Bag - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	PK	5020	Left Front Roof Rail Air Bag Low Control	I	—
2	0.5	PU / WH	5019	Left Front Roof Rail Air Bag High Control	I	—

F105RF Roof Rail Air Bag - Right Front



2698576

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13863037
Service Connector: 19369032
Description: 2-Way F 1.2 MCON Series, Sealed(YE)

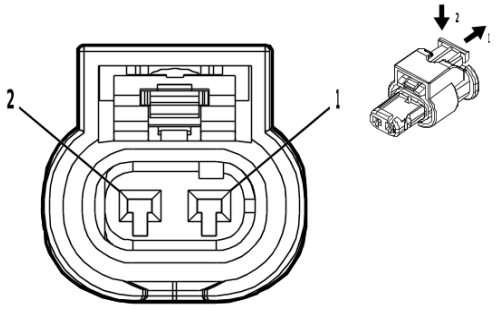
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

F105RF Roof Rail Air Bag - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / BK	5022	Right Front Roof Rail Air Bag Low Control	I	—
2	0.5	YE / BK	5021	Right Front Roof Rail Air Bag High Control	I	—

F105RR Roof Rail Air Bag - Right Rear



2698576

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13863037
Service Connector: 19369032
Description: 2-Way F 1.2 MCON Series, Sealed(YE)

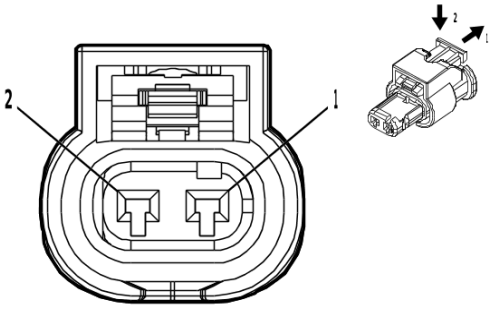
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

F105RR Roof Rail Air Bag - Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	TN / BK	7016	Right Rear Roof Rail Air Bag Low Control	I	—
2	0.5	L-BU	7015	Right Rear Roof Rail Air Bag High Control	I	—

F106D Seat Side Air Bag - Driver



2698576

Connector Part Information

Harness Type: Driver Seat Air Bag Jumper
OEM Connector: 13580144
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed(YE)

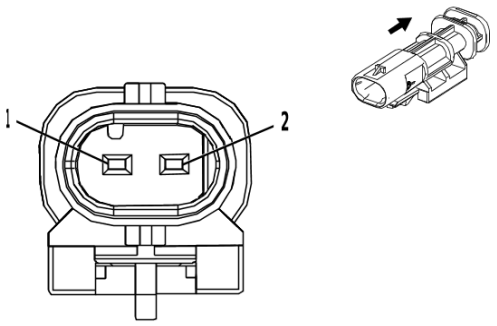
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

F106D Seat Side Air Bag - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	2137	Left Front Seat Side Air Bag High Control	I	—
2	—	YE / BK	2138	Left Front Seat Side Air Bag Low Control	I	—

F106P Seat Side Air Bag - Passenger



2474755

Connector Part Information

Harness Type: Passenger Seat Air Bag Jumper
OEM Connector: 13580142
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed(YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

F106P Seat Side Air Bag - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	TN / WH	2135	Right Front Seat Side Air Bag High Control	I	—
2	—	L-GN	2136	Right Front Seat Side Air Bag Low Control	I	—

F107 Steering Wheel Air Bag

—

Connector Part Information

Harness Type: Steering Wheel Air Bag
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

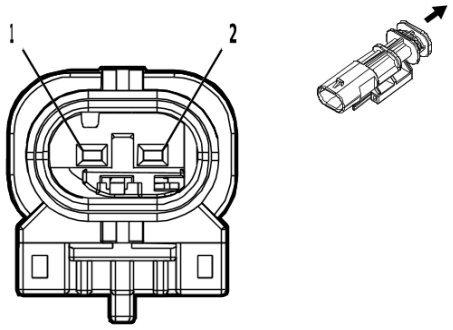
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

F107 Steering Wheel Air Bag

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	TN	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
2	—	BN	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—

F109D Seat Belt Buckle Pretensioner - Driver



4569729

Connector Part Information

Harness Type: Driver Seat Pretensioner Jumper
OEM Connector: 13581182
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed(YE)

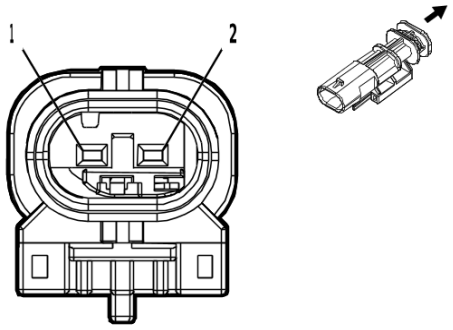
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

F109D Seat Belt Buckle Pretensioner - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	TN / WH	2118	Driver Seat Belt Pretensioner High Control	I	—
2	—	OG / BK	2119	Driver Seat Belt Pretensioner Low Control	I	—

F109P Seat Belt Buckle Pretensioner - Passenger



4569729

Connector Part Information

Harness Type: Passenger Seat Pretensioner Jumper
OEM Connector: 13581182
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series, Sealed(YE)

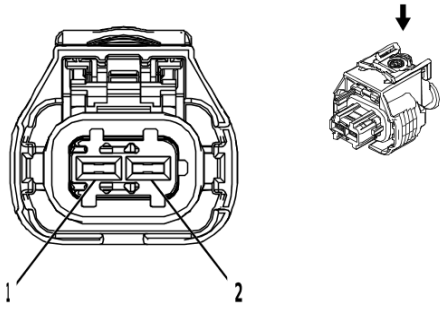
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

F109P Seat Belt Buckle Pretensioner - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	L-GN	2116	Passenger Seat Belt Pretensioner High Control	I	—
2	—	OG	2117	Passenger Seat Belt Pretensioner Low Control	I	—

G13 Generator X1



2577394

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed(BK)

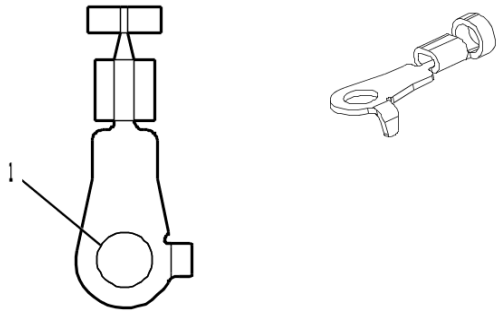
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-35 (VT)	No Tool Required

G13 Generator X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU / WH	225	Generator Turn On Signal	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

G13 Generator X2 (L8T+KG4+TP3)



4833656

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 15544794
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

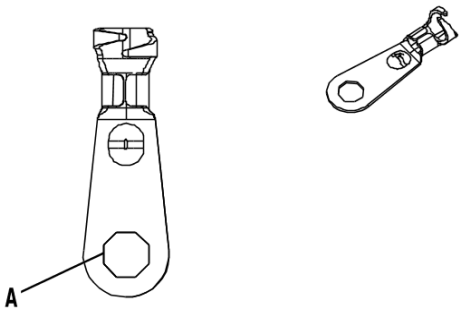
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

G13 Generator X2 (L8T+KG4+TP3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	25	RD	1	Unfused Battery Positive Voltage	I	—

G13 Generator X2 (L8T+KG4-TP3)



3214043

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 33257772
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

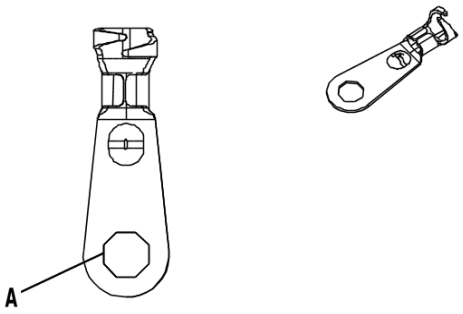
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

G13 Generator X2 (L8T+KG4-TP3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	25	RD	1	Unfused Battery Positive Voltage	I	—

G13 Generator X2 (L8T+KW5+TP3)



3214043

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 33257772
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

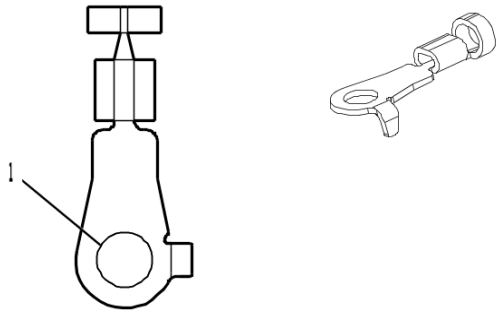
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

G13 Generator X2 (L8T+KW5+TP3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	25	RD	1	Unfused Battery Positive Voltage	I	—

G13 Generator X2 (L8T+KW5-TP3)



4833656

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 15544794
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

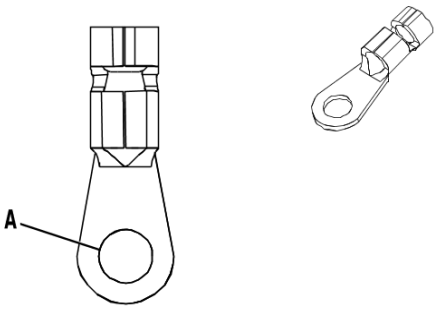
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

G13 Generator X2 (L8T+KW5-TP3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	25	RD	1	Unfused Battery Positive Voltage	I	—

G13 Generator X2 (LV1+K68)



2268698

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 12129598
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

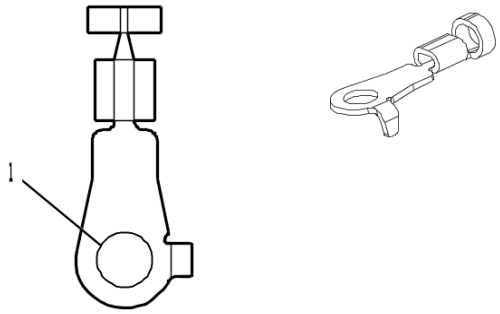
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

G13 Generator X2 (LV1+K68)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	19	RD	1	Unfused Battery Positive Voltage	I	—

G13 Generator X2 (LV1+KW5)



4833656

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 15544794
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

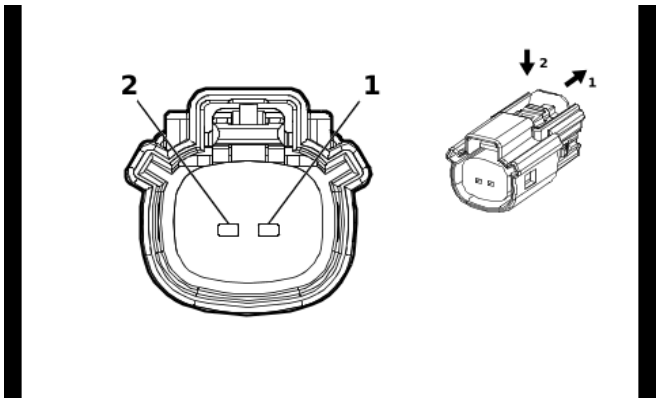
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

G13 Generator X2 (LV1+KW5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	25	RD	1	Unfused Battery Positive Voltage	I	—

G18 High Pressure Fuel Pump



2474713

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 MX Series, Sealed(BK)

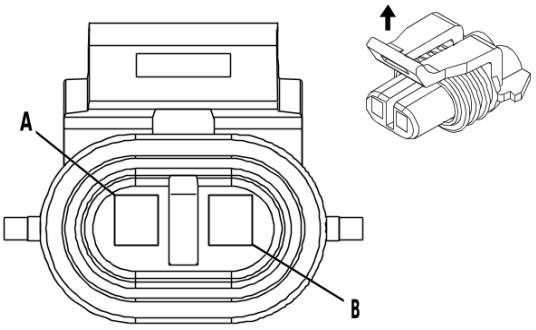
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

G18 High Pressure Fuel Pump

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	I	L8T
	0.75	YE	7301	High Pressure Fuel Pump High Control	I	LV1
2	0.75	YE	7301	High Pressure Fuel Pump High Control	I	L8T
	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	I	LV1

G24 Windshield Washer Pump



635009

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12052641
Service Connector: 13586114
Description: 2-Way F 150 Metri-Pack Series, Sealed(BK)

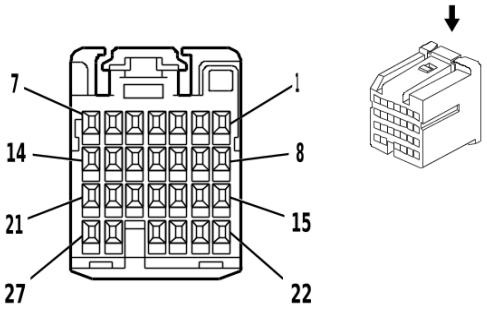
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

G24 Windshield Washer Pump

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	OG	228	Windshield Washer Pump Control	I	—
B	0.5	BK	350	Ground	I	—

K9 Body Control Module X1



1664495

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15482789
Service Connector: 88988838
Description: 27-Way F HIT Series(L-GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575870	J-35616-64B (L-BU)	J-38125-12A

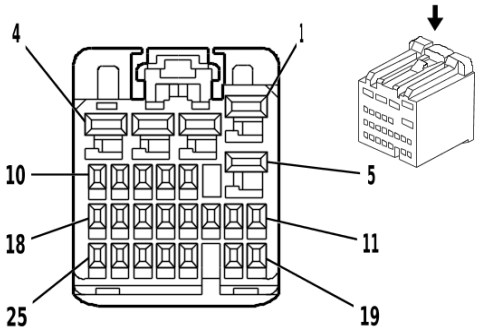
K9 Body Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	PK	1020	Off/Run/Crank Ignition Voltage	I	—
3	0.35	GY	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
4	0.35	WH	530	Off/Run/Crank Ignition Voltage	I	—
5	0.35	L-GN	1715	Windshield Wiper Switch High Signal	I	—
6	0.35	L-GN	6818	Steering Wheel Controls Signal 1	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	TN / BK	6009	Windshield Wiper Switch Low Reference	I	—
9	0.35	L-BU	1714	Windshield Wiper Switch Low Signal	I	—
10 - 13	—	—	—	Not Occupied	—	—
14	0.35	PK	3	Run/Crank Ignition 1 Voltage	I	—
15	0.35	D-GN	663	Hazard Switch Left Turn Signal	I	—
16	0.35	TN	664	Hazard Switch Right Turn Signal	I	—
17	0.35	PK	1444	12V Reference	I	—
18	0.35	YE	525	High Beam Select Switch Low Beam Signal	I	—
19	0.35	WH	111	Hazard Warning Switch Signal	I	—
20	0.35	PU	5526	Tap Up/Tap Down Switch Signal	I	—
21	0.35	BN	4	Accessory Ignition Voltage	I	—
22	—	—	—	Not Occupied	—	—
23	0.35	L-BU	1788	Traction Control Switch Signal 1	I	—
24	0.35	PK	94	Windshield Washer Switch Signal	I	—

K9 Body Control Module X1 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.35	YE	307	Headlamp Switch Flash Signal	I	—
26	0.5	TN / WH	816	Brake Transmission Shift Interlock Solenoid Actuator Control	I	—
27	—	—	—	Not Occupied	—	—

K9 Body Control Module X2



1664496

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15482790
Service Connector: 88988839
Description: 25-Way F HIT Series(NA)

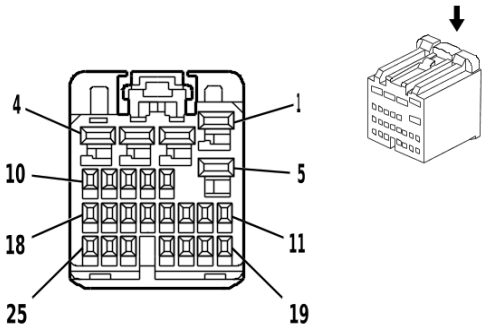
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575870	J-35616-64B (L-BU)	J-38125-12A
II	13575871	J-35616-35 (VT)	J-38125-12A

K9 Body Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	OG	1732	Control Module 12V Reference 3	II	—
2	0.5	RD / WH	2540	Battery Positive Voltage	II	—
3	0.5	BN / WH	230	Instrument Panel Lamp Dimming Control	II	—
4	—	—	—	Not Occupied	—	—
5	0.8	D-BU / WH	149	Courtesy Lamp Control	II	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.35	L-BU	13	Headlamp Switch Park Lamp Signal	I	—
9 - 10	—	—	—	Not Occupied	—	—
11	0.35	WH	278	Ambient Light Sensor Signal	I	—
12	0.35	WH	103	Headlamp Switch On Signal	I	—
13 - 16	—	—	—	Not Occupied	—	—
17	0.35	D-GN	306	Headlamp Switch Off Signal	I	—
18	0.35	D-BU / WH	149	Courtesy Lamp Control	I	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	D-BU	6727	Vehicle Stability Control Switch Signal	I	—
22	0.35	D-BU	38	Backup Lamp Relay Control	I	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.35	PU	328	Interior Lamp Defeat Switch Signal	I	—

K9 Body Control Module X3



1664498

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15482791
Service Connector: 88988840
Description: 25-Way F HIT Series(L-BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575870	J-35616-64B (L-BU)	J-38125-12A
II	13575871	J-35616-35 (VT)	J-38125-12A

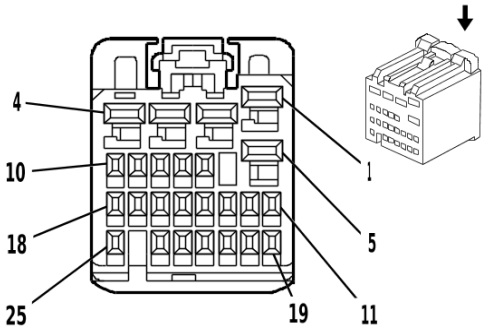
K9 Body Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK / WH	351	Signal Ground	II	—
2	0.8	RD / WH	2140	Battery Positive Voltage	II	—
3	0.5	RD / WH	3840	Battery Positive Voltage	II	—
4	—	—	—	Not Occupied	—	—
5	0.8	BK / WH	351	Signal Ground	II	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
9	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
10	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
11	0.35	D-GN	44	Instrument Panel Lamp Dimmer Switch Signal	I	—
12	0.35	OG / WH	812	12V Reference	I	—
13	0.5	TN	5380	Brake Position Sensor Signal	I	—
14	0.5	BN / WH	5382	Brake Position Sensor Low Reference	I	—
15	0.5	GY	5381	Brake Position Sensor 5V Reference	I	—
16	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
17	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
18	0.5	YE	6817	LED Backlight Dimming Control 1	I	—
19	0.5	WH / D-BU	5986	Serial Data Communication Enable	I	—
20 - 21	—	—	—	Not Occupied	—	—
22	0.35	D-GN / WH	7158	Cruise Control Indicator Dimming Signal	I	—

K9 Body Control Module X3 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23 - 24	—	—	—	Not Occupied	—	—
25	0.35	WH	6816	Indicator Dimming Control	I	—

K9 Body Control Module X4



1664499

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15482792
Service Connector: 88988841
Description: 25-Way F HIT Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575870	J-35616-64B (L-BU)	J-38125-12A
II	13575871	J-35616-35 (VT)	J-38125-12A
III	Not required	No Tool Required	No Tool Required

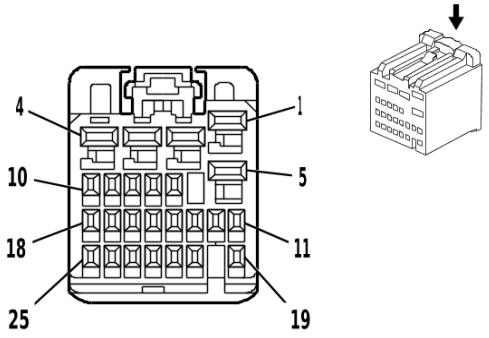
K9 Body Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	RD / WH	2740	Battery Positive Voltage	II	—
2	0.8	RD / WH	3040	Battery Positive Voltage	II	—
3	0.8	RD / WH	2940	Battery Positive Voltage	II	—
4	0.8	RD / WH	2240	Battery Positive Voltage	II	—
5	0.8	D-BU / WH	1315	Right Front Turn Signal Lamp Control	II	—
6	0.35	D-GN	6134	Body Control Module LIN Bus 3	I	—
7	0.35	YE	196	Windshield Wiper Motor Park Switch Signal	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	BK / WH	451	Signal Ground	I	—
10	0.5	RD / WH	2840	Battery Positive Voltage	I	—
11	—	L-GN	1391	Left Front Door Lock Relay Control	III	—
12	0.35	YE	5187	Right Trailer Turn Signal Lamp Control	I	—
13	0.35	OG	5186	Left Trailer Turn Signal Lamp Control	I	—
14	—	—	—	Not Occupied	—	—
15	0.35	OG	2268	Windshield Washer Relay Control	I	—
16	0.35	TN / WH	1969	Headlamp High Beam Relay Control	I	—
17	0.5	PK / BK	109	Hood Ajar Switch Signal	I	—
18	—	—	—	Not Occupied	—	—
19	0.5	D-BU	5985	Accessory Wake-Up Serial Data	I	—

K9 Body Control Module X4 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	—	L-BU	1344	Rear Compartment Lid Unlatch Relay Control	III	—
21	0.35	YE	5199	Run/Crank Relay Coil Control	I	—
22	—	—	—	Not Occupied	—	—
23	0.35	PU	544	DRL Relay Control	I	—
24	—	L-BU	244	Passenger Door Lock Switch Lock Control	III	—
25	—	—	—	Not Occupied	—	—

K9 Body Control Module X5



1664500

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15480179
Service Connector: 88988837
Description: 25-Way F HIT Series(BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575870	J-35616-64B (L-BU)	J-38125-12A
II	13575871	J-35616-35 (VT)	J-38125-12A
III	Not required	No Tool Required	No Tool Required

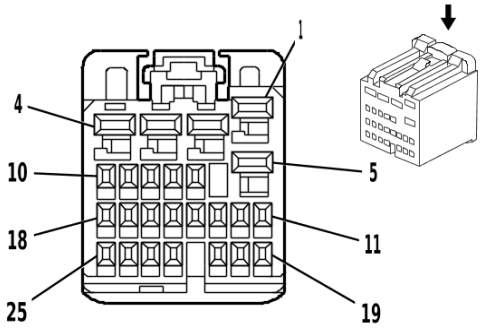
K9 Body Control Module X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	YE	618	Left Rear Turn Signal Lamp Control	II	—
2	1	D-GN	619	Right Rear Turn Signal Lamp Control	II	—
3	—	—	—	Not Occupied	—	—
4	0.8	L-BU / WH	1314	Left Front Turn Signal Lamp Control	II	—
5	0.5	WH	5065	Stop Lamp Relay Coil Control	II	—
6	0.35	WH / D-BU	6311	Cruise/ETC/TCC Brake Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	PK	5076	Current Sensor Voltage Reference	I	—
9	0.5	WH	5075	Current Sensor Signal	I	—
10	0.5	BN	5077	Current Sensor Low Reference	I	—
11	0.35	YE	43	Accessory Ignition Voltage	I	—
12	—	—	—	Not Occupied	—	—
13	0.35	OG	300	Run Ignition 3 Voltage	I	—
14	0.5	L-GN	24	Backup Lamp Control	I	—
15	0.5	PU	5531	Hood Closed Switch Signal	I	—
16	0.35	L-BU	1134	Park Brake Switch Signal	I	—
17	—	—	—	Not Occupied	—	—
18	0.35	TN	28	Horn Relay Control	I	—
19	—	YE	5810	Park Enable Signal	III	—

K9 Body Control Module X5 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	I	—
21	0.35	TN	860	Windshield Wiper Switch High Signal	I	—
22	—	—	—	Not Occupied	—	—
23	0.35	PK / WH	1970	Headlamp Low Beam Relay Control	I	—
24	0.35	D-BU	45	Park Lamp Relay Control	I	—
25	—	—	—	Not Occupied	—	—

K9 Body Control Module X6



1664502

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15482793
Service Connector: 88988842
Description: 25-Way F HIT Series(PK)

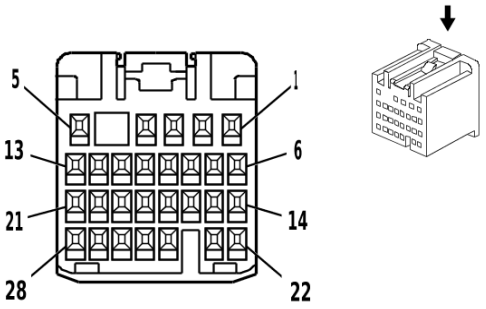
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575870	J-35616-64B (L-BU)	J-38125-12A
II	13575871	J-35616-35 (VT)	J-38125-12A

K9 Body Control Module X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.8	L-BU	1320	Center High Mounted Stop Lamp Control 2	II	—
3 - 7	—	—	—	Not Occupied	—	—
8	0.35	TN / WH	746	Right Front Door Ajar Switch Signal	I	—
9	0.35	D-BU	245	Passenger Door Lock Switch Unlock Control	I	—
10	0.35	GY / BK	745	Left Front Door Ajar Switch Signal	I	—
11	—	—	—	Not Occupied	—	—
12	0.35	PK / BK	1303	Liftgate Ajar Switch Signal 1	I	—
13	—	—	—	Not Occupied	—	—
14	0.35	YE / BK	1181	Right Rear Door Open Switch Signal	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	L-GN	1177	Right Front Door Open Switch Signal	I	—
17	—	—	—	Not Occupied	—	—
18	0.35	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
19 - 21	—	—	—	Not Occupied	—	—
22	0.35	L-GN	5926	Rear Body Opening Open Switch Signal	I	—
23 - 25	—	—	—	Not Occupied	—	—

K9 Body Control Module X7



1664505

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15466053
Service Connector: 88988806
Description: 28-Way F HIT Series(GY)

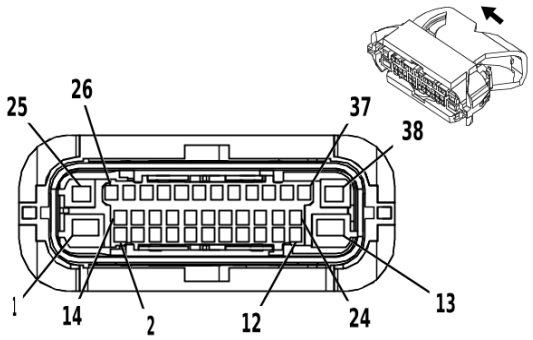
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575870	J-35616-18 (BK)	J-38125-553

K9 Body Control Module X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	YE	356	Driver Door Lock Relay Unlock Control	I	—
3 - 5	—	—	—	Not Occupied	—	—
6	0.5	YE	356	Driver Door Lock Relay Unlock Control	I	—
7	0.5	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
8	—	—	—	Not Occupied	—	—
9	0.5	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
10	—	—	—	Not Occupied	—	—
11	0.5	OG / BK	781	Driver Door Lock Switch Unlock Signal	I	—
12	0.5	PK / BK	780	Driver Door Lock Switch Lock Signal	I	—
13 - 22	—	—	—	Not Occupied	—	—
23	0.5	TN	126	Left Front Door Open Switch Signal	I	—
24	0.5	L-GN	66	A/C Request Signal	I	—
25 - 28	—	—	—	Not Occupied	—	—

K17 Electronic Brake Control Module



3638282

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13655518
Service Connector: Service by Harness - See Part Catalog
Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed(BK with BN Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-35 (VT)	No Tool Required
III	Not required	J-35616-40 (BU)	No Tool Required

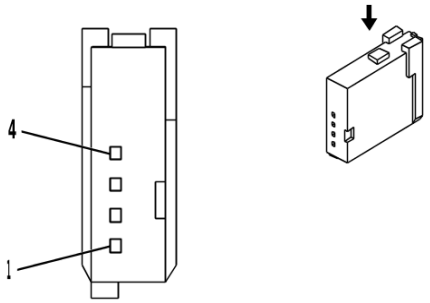
K17 Electronic Brake Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	5	RD / YE	442	Battery Positive Voltage	III	—
2	—	—	—	Not Occupied	—	—
3	0.5	GY / YE	7128	Right Rear Wheel Speed Sensor Control	I	—
4	0.5	VT	882	Right Rear Wheel Speed Sensor Signal	I	—
5	0.5	D-BU / YE	6105	High Speed GMLAN Serial Data [+] 2	I	—
6	0.5	WH	6106	High Speed GMLAN Serial Data [-] 2	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
9	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
10	0.5	GY / BN	7065	Right Front Wheel Speed Sensor Control	I	—
11	0.5	YE	872	Right Front Wheel Speed Sensor Signal	I	—
12	—	—	—	Not Occupied	—	—
13	5	BK	2150	Ground	III	—
14 - 16	—	—	—	Not Occupied	—	—
17	0.5	L-GN / BN	2087	Multi-axis Acceleration Sensor Supply Voltage	I	—
18 - 19	—	—	—	Not Occupied	—	—
20	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
21	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
22 - 24	—	—	—	Not Occupied	—	—

K17 Electronic Brake Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	2.5	RD / VT	1640	Battery Positive Voltage	II	—
26 - 27	—	—	—	Not Occupied	—	—
28	0.5	WH / D-BU	5986	Serial Data Communication Enable	I	—
29	0.5	GY / BK	7127	Left Rear Wheel Speed Sensor Control	I	—
30	0.5	D-BU	884	Left Rear Wheel Speed Sensor Signal	I	—
31 - 34	—	—	—	Not Occupied	—	—
35	0.5	GY / WH	7064	Left Front Wheel Speed Sensor Control	I	—
36	0.5	GY	830	Left Front Wheel Speed Sensor Signal	I	—
37	—	—	—	Not Occupied	—	—
38	2.5	BK	2150	Ground	II	—

K18 Compass Module



2831061

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 13820711
Service Connector: 19300398
Description: 4-Way F 0.64 Series(BK)

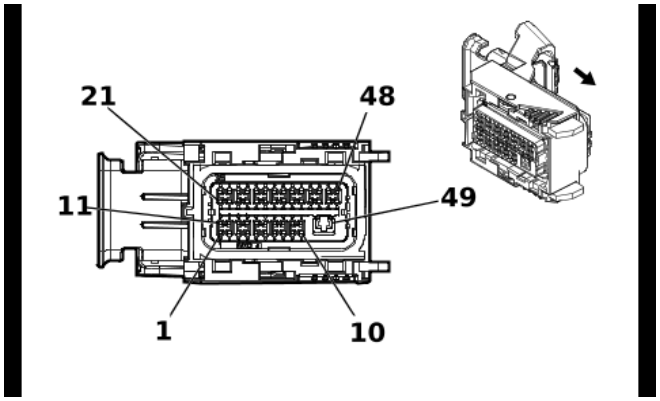
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

K18 Compass Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	441	Run Ignition 3 Voltage	I	—
2	0.5	BK / WH	351	Signal Ground	I	—
3	0.35	D-GN	6134	Body Control Module LIN Bus 3	I	—
4	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (L8T)



5663663

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35500079
Service Connector: 19368142
Description: 49-Way F 0.64, 2.8 Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (L-BU)	J-38125-213

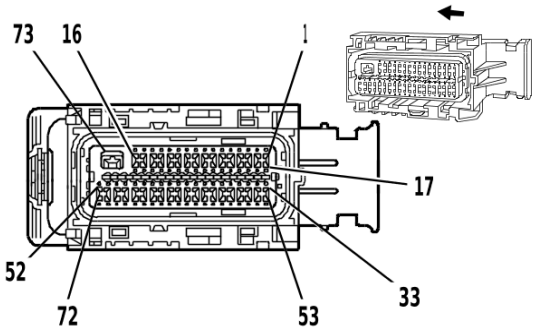
K20 Engine Control Module X1 (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN / WH	492	Mass Air Flow Sensor Signal	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	II	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	WH / D-BU	6311	Cruise/ETC/TCC Brake Signal	II	—
7	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
8	0.5	BN / WH	419	Check Engine Indicator Control	II	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.5	D-BU / GY	636	Ambient Air Temperature Sensor Signal	II	—
13	0.5	D-BU / BN	4498	High Speed GMLAN Serial Data [+] 7	II	—
14	0.5	WH / L-GN	5380	Brake Position Sensor Signal	II	—
15	—	—	—	Not Occupied	—	—
16	0.5	WH / GY	1786	Transmission Park/Neutral Signal 1	II	—
17	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
18	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	II	—
19 - 20	—	—	—	Not Occupied	—	—

K20 Engine Control Module X1 (L8T) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
21	0.5	L-GN / D-BU	428	EVAP Canister Purge Solenoid Control	II	—
22	—	—	—	Not Occupied	—	—
23	0.5	BK / L-GN	580	Engine Control Sensors Low Reference 2	II	—
24	0.5	BK / D-BU	1271	Accelerator Pedal Position Low Reference 1	II	—
25 - 27	—	—	—	Not Occupied	—	—
28	0.5	BN / L-GN	1174	Oil Level Switch Signal	II	—
29	—	—	—	Not Occupied	—	—
30	0.5	BK / VT	1272	Accelerator Pedal Position Low Reference 2	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / GY	1039	Run/Crank Ignition 1 Voltage	II	—
33	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
34	0.5	RD / WH	140	Battery Positive Voltage	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	YE / BK	625	Starter Enable Relay Control	II	—
37	0.5	L-GN / GY	465	Fuel Pump Primary Relay Control	II	—
38	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	II	—
39	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	II	—
40	0.5	YE / BN	331	Oil Pressure Sensor Signal	II	—
41	0.5	L-GN	380	A/C Refrigerant Pressure Sensor Signal	II	—
42 - 43	—	—	—	Not Occupied	—	—
44	0.5	L-GN / WH	1162	Accelerator Pedal Position Signal 2	II	—
45	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	II	—
46	—	—	—	Not Occupied	—	—
47	0.5	VT / L-GN	439	Run/Crank Ignition 1 Voltage	II	—
48	0.75	VT / D-BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
49	2.5	VT / D-BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X2 (L8T)



1673472

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35386331
Service Connector: 19333090
Description: 73-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354746	J-35616-64B (L-BU)	J-38125-215A
II	19368324	J-35616-35 (VT)	J-38125-11A

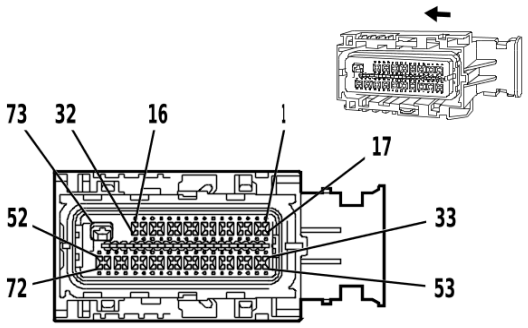
K20 Engine Control Module X2 (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	L-GN / WH	4622	Engine Control Module LIN Bus 2	I	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	I	—
11	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	I	—
12	0.5	YE / D-BU	2124	Ignition Control 4	I	—
13	0.5	BN / D-BU	2126	Ignition Control 6	I	—
14 - 15	—	—	—	Not Occupied	—	—
16	0.75	VT / D-BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—
17	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	I	—
18 - 25	—	—	—	Not Occupied	—	—
26	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	I	—
27	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	I	—
28	0.5	L-GN / D-BU	2123	Ignition Control 3	I	—

K20 Engine Control Module X2 (L8T) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
29	0.5	D-BU / GY	2125	Ignition Control 5	I	—
30	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
31 - 32	—	—	—	Not Occupied	—	—
33	0.5	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	I	—
34	—	—	—	Not Occupied	—	—
35	0.5	D-BU	179	Engine Oil Pump Control	I	—
36	—	—	—	Not Occupied	—	—
37	0.5	VT / D-BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE / D-BU	3221	HO2S Low Signal Bank 2 Sensor 2	I	—
47	0.5	VT / L-GN	3220	HO2S High Signal Bank 2 Sensor 2	I	—
48 - 49	—	—	—	Not Occupied	—	—
50	0.75	BK / GY	2303	Knock Sensor Low Reference 2	I	—
51	0.75	BK / YE	1716	Knock Sensor Low Reference 1	I	—
52	0.5	BN / WH	582	Throttle Actuator Close Control	I	—
53	0.5	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	I	—
54 - 58	—	—	—	Not Occupied	—	—
59	0.5	D-BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
60 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	I	—
67	0.5	VT / D-BU	3120	HO2S High Signal Bank 1 Sensor 2	I	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.75	WH / GY	1876	Knock Sensor 2 Signal	I	—
71	0.75	VT / GY	496	Knock Sensor 1 Signal	I	—
72	0.5	YE	581	Throttle Actuator Open Control	I	—
73	3	BK / WH	1551	Signal Ground	II	—

K20 Engine Control Module X3 (L8T)



1650395

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35505841
Service Connector: 19333091
Description: 73-Way F 0.64, 2.8 Series, Sealed(BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354746	J-35616-64B (L-BU)	J-38125-215A
II	19368324	J-35616-35 (VT)	J-38125-11A

K20 Engine Control Module X3 (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	I	—
6	0.5	VT / L-GN	4320	Powertrain Sensor Bus Enable	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	I	—
9	0.5	GY / D-BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	I	—
10	0.5	L-GN	6271	Crankshaft Position Sensor Signal	I	—
11	—	—	—	Not Occupied	—	—
12	0.5	D-BU / WH	2122	Ignition Control 2	I	—
13	0.5	VT / WH	2128	Ignition Control 8	I	—
14	0.5	D-BU / WH	225	Generator Turn On Signal	I	—
15	—	—	—	Not Occupied	—	—
16	0.75	YE	7301	High Pressure Fuel Pump High Control	I	—
17 - 18	—	—	—	Not Occupied	—	—
19	0.5	BN / VT	6399	Replicated Transmission Output Speed Signal	I	—
20	—	—	—	Not Occupied	—	—
21	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	I	—

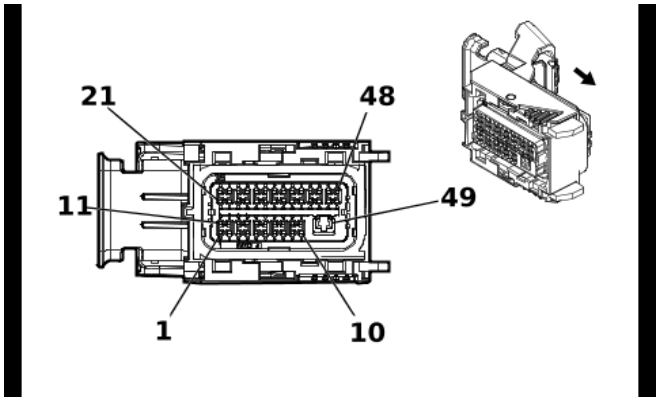
K20 Engine Control Module X3 (L8T) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22 - 23	—	—	—	Not Occupied	—	—
24	0.5	BK / L-GN	5301	Intake Camshaft Position Sensor Low Reference 1	I	—
25	0.5	VT / D-BU	6270	Crankshaft Position Sensor Voltage	I	—
26	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
27	—	—	—	Not Occupied	—	—
28	0.5	L-GN / GY	2127	Ignition Control 7	I	—
29	0.5	D-BU / VT	2121	Ignition Control 1	I	—
30	0.5	BK / D-BU	2129	Ignition Control Low Reference Bank 1	I	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	I	—
33 - 35	—	—	—	Not Occupied	—	—
36	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	I	—
37	0.5	BK / L-GN	469	Manifold Absolute Pressure Sensor Low Reference	I	—
38 - 39	—	—	—	Not Occupied	—	—
40	0.5	BN / D-BU	357	Oil Temperature Sensor Signal	I	—
41 - 42	—	—	—	Not Occupied	—	—
43	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—
44	0.75	VT / BK	1239	Run/Crank Ignition 1 Voltage	I	—
45	0.75	L-GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	I	—
46	0.75	GY / D-BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	I	—
47	0.75	WH / L-GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	I	—
48	0.75	VT / L-GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	I	—
49	0.75	D-BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	I	—
50	0.75	YE / GY	4807	Direct Fuel Injector High Voltage Control Cylinder 7	I	—
51	0.75	GY	4808	Direct Fuel Injector High Voltage Control Cylinder 8	I	—
52	0.75	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	I	—
53 - 54	—	—	—	Not Occupied	—	—
55	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	I	—
56	0.5	D-BU / WH	3630	Throttle Position Sensor SENT 1 Signal	I	—
57	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
58	0.5	L-GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—
59 - 60	—	—	—	Not Occupied	—	—
61	0.5	D-BU	410	Engine Coolant Temperature Sensor Signal	I	—

K20 Engine Control Module X3 (L8T) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
62	—	—	—	Not Occupied	—	—
63	0.5	D-BU / WH	2918	Fuel Rail Pressure Sensor Signal	I	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
65	0.75	L-GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	I	—
66	0.75	D-BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	I	—
67	0.75	L-GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	I	—
68	0.75	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	I	—
69	0.75	D-BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	I	—
70	0.75	WH / YE	4907	Direct Fuel Injector High Voltage Supply Cylinder 7	I	—
71	0.75	GY / WH	4908	Direct Fuel Injector High Voltage Supply Cylinder 8	I	—
72	0.75	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	I	—
73	3	BK / WH	1551	Signal Ground	II	—

K20 Engine Control Module X1 (LV1)



5663663

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35500079
Service Connector: 19368142
Description: 49-Way F 0.64, 2.8 Series, Sealed(BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (L-BU)	J-38125-213

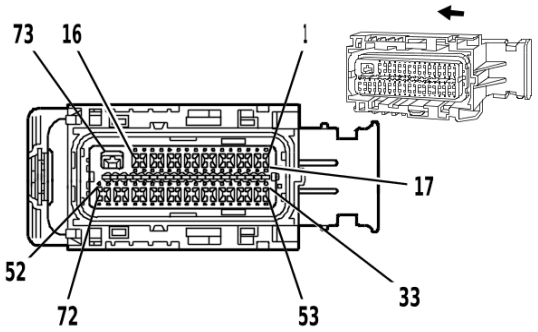
K20 Engine Control Module X1 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN / WH	492	Mass Air Flow Sensor Signal	II	—
2	—	—	—	Not Occupied	—	—
3	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	II	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.5	WH / D-BU	6311	Cruise/ETC/TCC Brake Signal	II	—
7	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
8	0.5	BN / WH	419	Check Engine Indicator Control	II	—
9	0.5	YE	5991	Powertrain Relay Coil Control	II	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.5	D-BU / GY	636	Ambient Air Temperature Sensor Signal	II	—
13	0.5	D-BU / BN	4498	High Speed GMLAN Serial Data [+] 7	II	—
14	0.5	WH / L-GN	5380	Brake Position Sensor Signal	II	—
15 - 16	—	—	—	Not Occupied	—	—
17	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
18	0.5	WH / GY	459	A/C Compressor Clutch Relay Control	II	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	L-GN / D-BU	428	EVAP Canister Purge Solenoid Control	II	—

K20 Engine Control Module X1 (LV1) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	—	—	—	Not Occupied	—	—
23	0.5	BK / L-GN	580	Engine Control Sensors Low Reference 2	II	—
24	0.5	BK / D-BU	1271	Accelerator Pedal Position Low Reference 1	II	—
25 - 26	—	—	—	Not Occupied	—	—
27	0.5	L-GN / YE	3337	Transmission Internal Mode Switch Mode Control Y	II	—
28	0.5	BN / L-GN	1174	Oil Level Switch Signal	II	—
29	—	—	—	Not Occupied	—	—
30	0.5	BK / VT	1272	Accelerator Pedal Position Low Reference 2	II	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / GY	1039	Run/Crank Ignition 1 Voltage	II	—
33	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
34	0.5	RD / WH	140	Battery Positive Voltage	II	—
35	—	—	—	Not Occupied	—	—
36	0.5	YE / BK	625	Starter Enable Relay Control	II	—
37	0.5	L-GN / GY	465	Fuel Pump Primary Relay Control	II	—
38	0.5	WH / RD	1164	Accelerator Pedal Position 5V Reference 1	II	—
39	0.5	YE / WH	1161	Accelerator Pedal Position Signal 1	II	—
40	0.5	YE / BN	331	Oil Pressure Sensor Signal	II	—
41	0.5	L-GN	380	A/C Refrigerant Pressure Sensor Signal	II	—
42 - 43	—	—	—	Not Occupied	—	—
44	0.5	L-GN / WH	1162	Accelerator Pedal Position Signal 2	II	—
45	0.5	BN / RD	1274	Accelerator Pedal Position 5V Reference 2	II	—
46	—	—	—	Not Occupied	—	—
47	0.5	VT / L-GN	439	Run/Crank Ignition 1 Voltage	II	—
48	0.75	VT / D-BU	5291	Powertrain Main Relay Fused Supply Voltage 2	II	—
49	2.5	VT / D-BU	5290	Powertrain Main Relay Fused Supply Voltage 1	I	—

K20 Engine Control Module X2 (LV1)



1673472

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35386331
Service Connector: 19333090
Description: 73-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354746	J-35616-64B (L-BU)	J-38125-215A
II	19368324	J-35616-35 (VT)	J-38125-11A

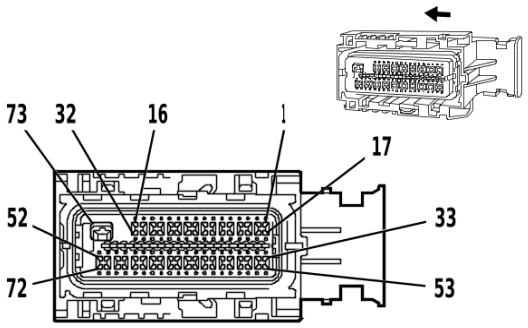
K20 Engine Control Module X2 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN / YE	3212	HO2S Heater Low Control Bank 2 Sensor 1	I	—
2	—	—	—	Not Occupied	—	—
3	0.5	BK / YE	548	Engine Control Sensors Low Reference 1	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	L-GN / WH	4622	Engine Control Module LIN Bus 2	I	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	VT / GY	3110	HO2S High Signal Bank 1 Sensor 1	I	—
11	0.5	WH / BK	3111	HO2S Low Signal Bank 1 Sensor 1	I	—
12	—	—	—	Not Occupied	—	—
13	0.5	L-GN / D-BU	2123	Ignition Control 3	I	—
14 - 15	—	—	—	Not Occupied	—	—
16	0.75	VT / D-BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—
17	0.5	GY / WH	3113	HO2S Heater Low Control Bank 1 Sensor 1	I	—
18 - 25	—	—	—	Not Occupied	—	—
26	0.5	VT / WH	3210	HO2S High Signal Bank 2 Sensor 1	I	—
27	0.5	YE / WH	3211	HO2S Low Signal Bank 2 Sensor 1	I	—
28	—	—	—	Not Occupied	—	—
29	0.5	D-BU / WH	2122	Ignition Control 2	I	—

K20 Engine Control Module X2 (LV1) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
30	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
31 - 32	—	—	—	Not Occupied	—	—
33	0.5	WH / BN	3223	HO2S Heater Low Control Bank 2 Sensor 2	I	—
34 - 36	—	—	—	Not Occupied	—	—
37	0.5	VT / D-BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
38	—	—	—	Not Occupied	—	—
39	0.5	WH / RD	480	Engine Control Vehicle Sensors 5 Volt Reference 1	I	—
40 - 45	—	—	—	Not Occupied	—	—
46	0.5	YE / D-BU	3221	HO2S Low Signal Bank 2 Sensor 2	I	—
47	0.5	VT / L-GN	3220	HO2S High Signal Bank 2 Sensor 2	I	—
48 - 49	—	—	—	Not Occupied	—	—
50	0.75	BK / GY	2303	Knock Sensor Low Reference 2	I	—
51	0.75	BK / YE	1716	Knock Sensor Low Reference 1	I	—
52	0.5	BN / WH	582	Throttle Actuator Close Control	I	—
53	0.5	GY / WH	3122	HO2S Heater Low Control Bank 1 Sensor 2	I	—
54 - 58	—	—	—	Not Occupied	—	—
59	0.5	D-BU / RD	460	Engine Control Sensors 5 Volt Reference 1	I	—
60 - 65	—	—	—	Not Occupied	—	—
66	0.5	WH / YE	3121	HO2S Low Signal Bank 1 Sensor 2	I	—
67	0.5	VT / D-BU	3120	HO2S High Signal Bank 1 Sensor 2	I	—
68 - 69	—	—	—	Not Occupied	—	—
70	0.75	WH / GY	1876	Knock Sensor 2 Signal	I	—
71	0.75	VT / GY	496	Knock Sensor 1 Signal	I	—
72	0.5	YE	581	Throttle Actuator Open Control	I	—
73	3	BK / WH	1551	Signal Ground	II	—

K20 Engine Control Module X3 (LV1)



1650395

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35505841
Service Connector: 19333091
Description: 73-Way F 0.64, 2.8 Series, Sealed(BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19354746	J-35616-64B (L-BU)	J-38125-215A
II	19368324	J-35616-35 (VT)	J-38125-11A

K20 Engine Control Module X3 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	—	—	—	Not Occupied	—	—
5	0.5	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	I	—
6	0.5	VT / L-GN	4320	Powertrain Sensor Bus Enable	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	YE / VT	5275	Intake Camshaft Position Sensor 1	I	—
9	0.5	GY / D-BU	5300	Intake Camshaft Position Sensor 1 Voltage Reference	I	—
10	0.5	L-GN	6271	Crankshaft Position Sensor Signal	I	—
11	—	—	—	Not Occupied	—	—
12	0.5	YE / D-BU	2124	Ignition Control 4	I	—
13	0.5	BN / D-BU	2126	Ignition Control 6	I	—
14	0.5	D-BU / WH	225	Generator Turn On Signal	I	—
15	—	—	—	Not Occupied	—	—
16	0.75	YE	7301	High Pressure Fuel Pump High Control	I	—
17 - 20	—	—	—	Not Occupied	—	—
21	0.5	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	I	—
22 - 23	—	—	—	Not Occupied	—	—

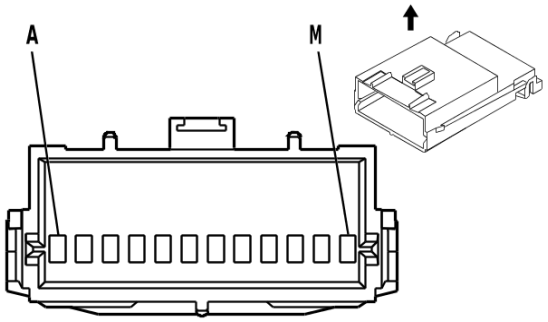
K20 Engine Control Module X3 (LV1) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
24	0.5	BK / L-GN	5301	Intake Camshaft Position Sensor Low Reference 1	I	—
25	0.5	VT / D-BU	6270	Crankshaft Position Sensor Voltage	I	—
26	0.5	BK / VT	6272	Crankshaft Position Sensor Low Reference	I	—
27	—	—	—	Not Occupied	—	—
28	0.5	D-BU / GY	2125	Ignition Control 5	I	—
29	0.5	D-BU / VT	2121	Ignition Control 1	I	—
30	0.5	BK / D-BU	2129	Ignition Control Low Reference Bank 1	I	—
31	—	—	—	Not Occupied	—	—
32	0.75	VT / BK	7300	High Pressure Fuel Pump Low Control	I	—
33 - 35	—	—	—	Not Occupied	—	—
36	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	I	—
37	0.5	BK / L-GN	469	Manifold Absolute Pressure Sensor Low Reference	I	—
38 - 42	—	—	—	Not Occupied	—	—
43	0.5	BK / GY	626	Engine Control Vehicle Sensors Low Reference 1	I	—
44	0.75	VT / BK	1239	Run/Crank Ignition 1 Voltage	I	—
45 - 46	—	—	—	Not Occupied	—	—
47	0.75	D-BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	I	—
48	0.75	L-GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	I	—
49	0.75	GY / D-BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	I	—
50	0.75	WH / L-GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	I	—
51	0.75	VT / L-GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	I	—
52	0.75	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	I	—
53 - 54	—	—	—	Not Occupied	—	—
55	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	I	—
56	0.5	D-BU / WH	3630	Throttle Position Sensor SENT 1 Signal	I	—
57	0.5	GY / RD	2704	Manifold Absolute Pressure Sensor 5V Reference	I	—
58	0.5	L-GN / WH	432	Manifold Absolute Pressure Sensor Signal	I	—
59 - 60	—	—	—	Not Occupied	—	—
61	0.5	D-BU	410	Engine Coolant Temperature Sensor Signal	I	—
62	—	—	—	Not Occupied	—	—
63	0.5	D-BU / WH	2918	Fuel Rail Pressure Sensor Signal	I	—
64	0.5	GY	23	Generator Field Duty Cycle Signal	I	—
65 - 66	—	—	—	Not Occupied	—	—

K20 Engine Control Module X3 (LV1) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
67	0.75	D-BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	I	—
68	0.75	L-GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	I	—
69	0.75	D-BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	I	—
70	0.75	L-GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	I	—
71	0.75	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	I	—
72	0.75	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	I	—
73	3	BK / WH	1551	Signal Ground	II	—

K33A HVAC Control Module - Auxiliary



328486

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 12040747
Service Connector: 12101938
Description: 12-Way F P/C Edgeboard Standard Series(BK)

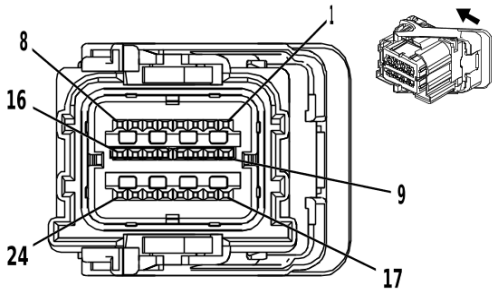
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19330178	J-35616-4A (PU)	J-38125-12A

K33A HVAC Control Module - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	PU	5260	Auxiliary HVAC Front Temperature Signal	I	—
B	0.35	OG	2775	Rear Air Temperature Door Actuator Control	I	—
C	0.5	BN	5263	Auxiliary HVAC Rear Temperature Signal	I	—
D	0.5	PU / WH	5264	Auxiliary HVAC Rear Mode Signal	I	—
E	0.35	TN	5261	Auxiliary HVAC Front Mode Signal	I	—
F	0.35	GY	2599	Rear Mode Door Actuator Signal	I	—
G	—	—	—	Not Occupied	—	—
H	0.35	BK	1850	Ground	I	—
J	0.35	BN	341	Run Ignition 3 Voltage	I	—
K	—	—	—	Not Occupied	—	—
L	0.5	PK / BK	5265	Auxiliary HVAC Rear Control Signal	I	—
M	0.35	YE	5262	Auxiliary HVAC Rear Controls Enable Signal	I	—

K36 Inflatable Restraint Sensing and Diagnostic Module X1



3240106

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13859806
Service Connector: 13579314
Description: 24-Way F 0.64 Series, Sealed(YE)

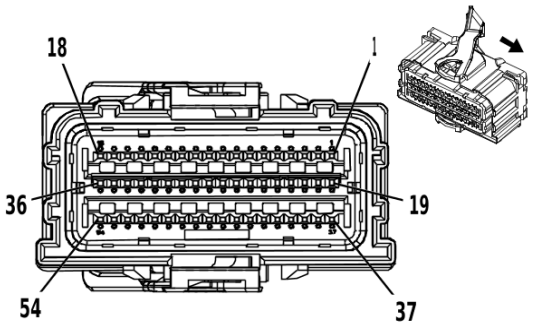
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19328872	J-35616-64B (L-BU)	J-38125-11A

K36 Inflatable Restraint Sensing and Diagnostic Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	BN	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—
4	0.5	TN	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
5	0.5	YE	3025	Passenger Instrument Panel Air Bag Stage 1 High Control	I	—
6	0.5	OG	3024	Passenger Instrument Panel Air Bag Stage 1 Low Control	I	—
7 - 8	—	—	—	Not Occupied	—	—
9	0.5	RD / WH	3440	Battery Positive Voltage	I	—
10 - 12	—	—	—	Not Occupied	—	—
13	0.5	PK	353	Passenger Supplemental Inflatable Restraint Suppression Indicator Control	I	—
14	0.5	TN / BK	371	Passenger Supplemental Inflatable Restraint Disable Switch Signal	I	—
15	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
16	—	—	—	Not Occupied	—	—
17	0.35	PK	1139	Run/Crank Ignition 1 Voltage	I	—
18	—	—	—	Not Occupied	—	—
19	0.5	BK / WH	1751	Signal Ground	I	—
20 - 24	—	—	—	Not Occupied	—	—

K36 Inflatable Restraint Sensing and Diagnostic Module X2



2817420

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13914358
Service Connector: 19303770
Description: 54-Way F 0.64 Series, Sealed(YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19328872	J-35616-64B (L-BU)	J-38125-11A
II	Not required	No Tool Required	No Tool Required

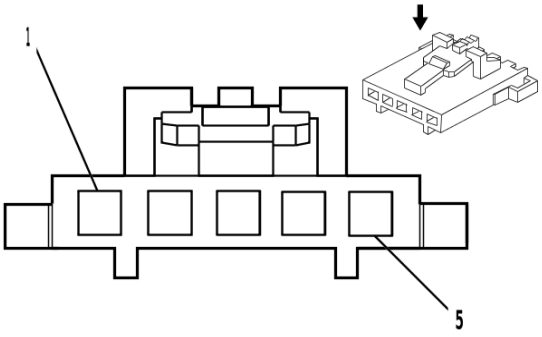
K36 Inflatable Restraint Sensing and Diagnostic Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 10	—	—	—	Not Occupied	—	—
11	0.5	TN / BK	7016	Right Rear Roof Rail Air Bag Low Control	I	—
12	0.5	L-BU	7015	Right Rear Roof Rail Air Bag High Control	I	—
13	0.5	BN	2137	Left Front Seat Side Air Bag High Control	I	—
14	0.5	YE / BK	2138	Left Front Seat Side Air Bag Low Control	I	—
15	0.5	L-GN	2136	Right Front Seat Side Air Bag Low Control	I	—
16	0.5	TN / WH	2135	Right Front Seat Side Air Bag High Control	I	—
17	0.5	PU / WH	5019	Left Front Roof Rail Air Bag High Control	I	—
18	0.5	PK	5020	Left Front Roof Rail Air Bag Low Control	I	—
19	0.5	WH	2132	Left Front Side Impact Sensor Signal	I	—
20	0.5	PU / WH	6628	Left Front Side Impact Sensor Low Reference	I	—
21	0.5	WH / BK	6629	Right Front Side Impact Sensor Low Reference	I	—
22	0.5	D-GN	2134	Right Front Side Impact Sensor Signal	I	—
23 - 24	—	—	—	Not Occupied	—	—
25	0.5	D-BU / WH	6619	Front Middle Impact Discriminating Sensor Low Reference	I	—
26	0.5	BN / WH	6618	Front Middle Impact Discriminating Sensor Signal	I	—
27	0.5	D-GN / WH	6620	Left Middle Side Impact Sensor Signal	I	—
28	0.5	GY / BK	6621	Left Middle Side Impact Sensor Low Reference	I	—

K36 Inflatable Restraint Sensing and Diagnostic Module X2 (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
29	0.5	L-GN / WH	6625	Right Middle Side Impact Sensor Low Reference	I	—
30	0.5	L-BU / BK	6624	Right Middle Side Impact Sensor Signal	I	—
31 - 36	—	—	—	Not Occupied	—	—
37	0.5	TN / WH	2118	Driver Seat Belt Pretensioner High Control	I	—
38	0.5	OG / BK	2119	Driver Seat Belt Pretensioner Low Control	I	—
39	0.5	OG	2117	Passenger Seat Belt Pretensioner Low Control	I	—
40	0.5	L-GN	2116	Passenger Seat Belt Pretensioner High Control	I	—
41	0.5	TN / WH	238	Driver Seat Belt Switch Signal	I	—
42	—	—	—	Not Occupied	—	—
43	0.5	PK	5057	Seat Position Switch Low Reference	I	—
44	—	L-BU	1361	Passenger Seat Belt Switch Low Reference	II	—
45	—	OG	1362	Passenger Seat Belt Switch Signal	II	—
46 - 52	—	—	—	Not Occupied	—	—
53	0.5	YE / BK	5021	Right Front Roof Rail Air Bag High Control	I	—
54	0.5	WH / BK	5022	Right Front Roof Rail Air Bag Low Control	I	—

K64 Content Theft Deterrent Control Module



1593355

Connector Part Information

Harness Type: Steering Column
OEM Connector: 15383337
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way F SL Series(BK)

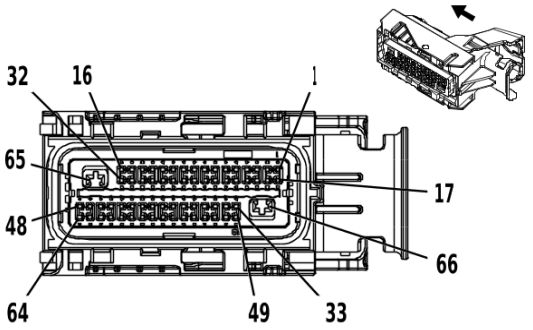
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K64 Content Theft Deterrent Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	RD / WH	540	Battery Positive Voltage	I	—
2	—	BN	4	Accessory Ignition Voltage	I	—
3	—	BK / WH	351	Signal Ground	I	—
4	—	D-GN	5060	Low Speed GMLAN Serial Data	I	—
5	—	—	—	Not Occupied	—	—

K71 Transmission Control Module (M5U)



3621452

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13965710
Service Connector: 19329822
Description: 66-Way F 0.64, 2.8 Series, Sealed(BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587518	J-35616-35 (VT)	J-38125-11A
II	19351723	J-35616-64B (L-BU)	J-38125-213

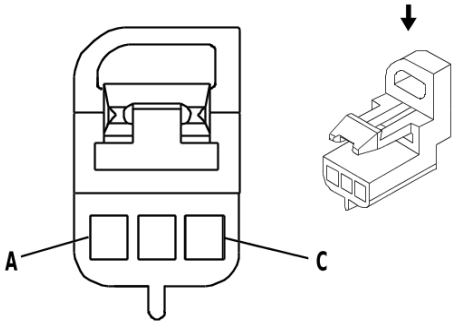
K71 Transmission Control Module (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH / D-BU	4507	Transmission Clutch H Control	II	—
2	0.5	D-BU	6401	Clutch Solenoid Valve B Control	II	—
3	0.5	GN / WH	1530	Transmission Line Pressure Control Solenoid Valve Control	II	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.5	YE / L-GN	4170	Transmission Output Shaft Speed Sensor Circuit 9V Reference	II	—
8	0.5	YE / D-BU	4171	Transmission Input Shaft Speed Sensor Circuit 9V Reference	II	—
9 - 12	—	—	—	Not Occupied	—	—
13	0.5	L-GN / VT	4510	Transmission Intermediate Speed Signal	II	—
14	0.5	GY / D-BU	6358	Output Speed Signal	II	—
15	0.5	L-GN / YE	6353	Input Speed Signal	II	—
16	—	—	—	Not Occupied	—	—
17	0.5	WH	4508	Transmission Clutch G Control	II	—
18	0.5	BN	6400	Clutch Solenoid Valve A Control	II	—
19	0.5	GY	6402	Clutch Solenoid Valve C Control	II	—
20	0.5	VT / WH	422	Torque Converter Clutch Solenoid Valve Control	II	—
21	0.5	L-GN / WH	6380	Torque Converter Clutch Enable Solenoid Valve A Control	II	—

K71 Transmission Control Module (M5U) (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22	0.5	YE / BN	6210	Torque Converter Clutch Enable Solenoid Valve B Control	II	—
23 - 27	—	—	—	Not Occupied	—	—
28	0.5	BK / BN	586	Transmission Fluid Temperature Sensor Low Reference	II	—
29 - 32	—	—	—	Not Occupied	—	—
33	0.5	L-GN / GY	6387	Transmission High Side Driver 1 Control	II	—
34	—	—	—	Not Occupied	—	—
35	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	II	—
36	—	—	—	Not Occupied	—	—
37	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
38	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
39 - 48	—	—	—	Not Occupied	—	—
49	0.75	GY / BN	6388	Transmission High Side Driver 2 Control	II	—
50	—	—	—	Not Occupied	—	—
51	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	II	—
52	—	—	—	Not Occupied	—	—
53	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	II	—
54	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	II	—
55 - 62	—	—	—	Not Occupied	—	—
63	0.5	BN / WH	585	Transmission Fluid Temperature Sensor Signal	II	—
64	0.5	D-BU / WH	3338	Transmission Internal Mode Switch Mode Control X	II	—
65	0.75	BK / WH	1551	Signal Ground	I	—
66	0.75	RD / L-GN	1840	Battery Positive Voltage	I	—

K71 Transmission Control Module X3 (MYD)



2334125

Connector Part Information

Harness Type: Automatic Transmission Input and Output Speed Sensor Wiring Harness
OEM Connector: 13539487
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 150 Metri-Pack Series(BK)

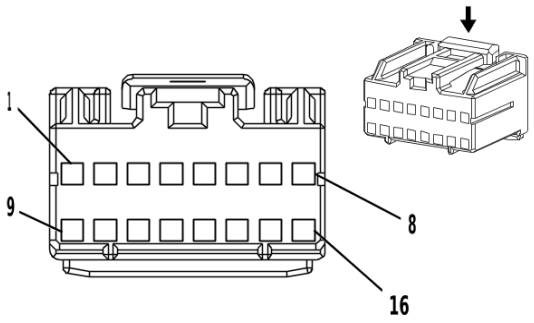
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

K71 Transmission Control Module X3 (MYD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	GN	—	—	I	—
B	—	RD	—	—	I	—
C	—	BK	—	—	I	—

K73 Telematics Communication Interface Control Module X1



1471689

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15431362
Service Connector: 15306351
Description: 16-Way F 100A Micro-Pack Series(NA)

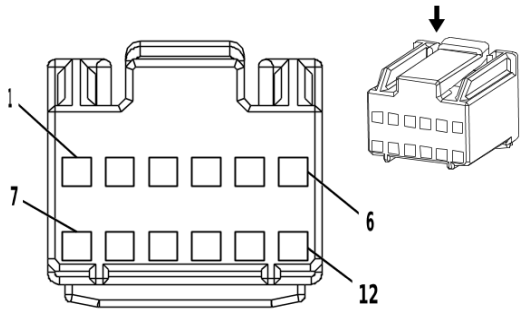
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575548	J-35616-16 (L-GN)	J-38125-559

K73 Telematics Communication Interface Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-GN	5060	Low Speed GMLAN Serial Data	I	—
2	0.8	BN / WH	2517	Telematics Switch Red LED Indicator Control	I	—
3	0.8	YE / BK	2516	Telematics Switch Green LED Indicator Control	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	0.8	L-GN / BK	2515	Telematics Switch Supply Voltage	I	—
7	0.8	BK / WH	351	Signal Ground	I	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
11	0.8	D-GN / WH	2514	Telematics Switch Signal	I	—
12	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
13 - 14	—	—	—	Not Occupied	—	—
15	0.8	RD / WH	3240	Battery Positive Voltage	I	—
16	—	—	—	Not Occupied	—	—

K73 Telematics Communication Interface Control Module X2



1471691

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15431365
Service Connector: 88952886
Description: 12-Way F 100A Micro-Pack Series(NA)

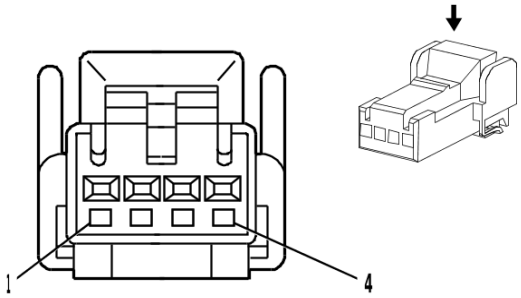
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13578873	J-35616-64B (L-BU)	J-38125-559

K73 Telematics Communication Interface Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	D-BU	658	Cellular Telephone Voice Signal	I	—
2	0.8	L-BU / BK	659	Cellular Telephone Voice Low Reference	I	—
3	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
4	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
5 - 7	—	—	—	Not Occupied	—	—
8	0.8	Bare	1792	Low Reference	I	—
9	0.8	GY	655	Cellular Telephone Microphone Signal	I	—
10	0.8	D-GN	654	Cellular Telephone Microphone Low Reference	I	—
11 - 12	—	—	—	Not Occupied	—	—

K77 Remote Control Door Lock Receiver



1673483

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15462684
Service Connector: 13585474
Description: 4-Way F IL-AG5 Series(GN)

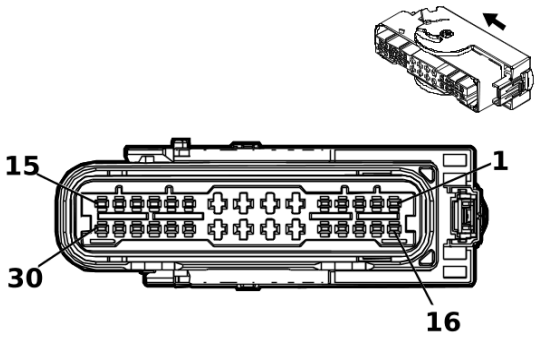
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

K77 Remote Control Door Lock Receiver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / WH	5340	Battery Positive Voltage	I	—
2	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
3	—	—	—	Not Occupied	—	—
4	0.35	BK / WH	351	Signal Ground	I	—

K111 Fuel Pump Driver Control Module



3240109

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 35373123
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F 1.5, 2.8 MCP Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

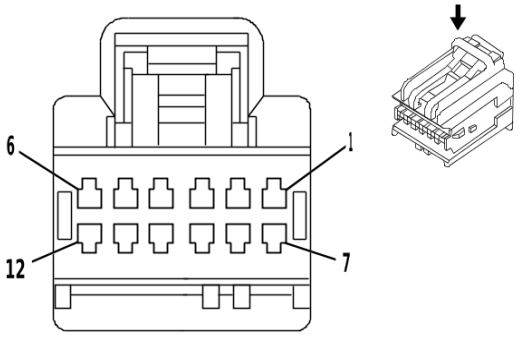
K111 Fuel Pump Driver Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 6	—	—	—	Not Occupied	—	—
7	2.5	RD / VT	1940	Battery Positive Voltage	II	—
8	2.5	GY	120	Fuel Pump Control	II	—
9	2.5	YE / GY	4137	Fuel Pump Supply Voltage Phase 2	II	—
10	0.5	YE / RD	2709	Fuel Tank Pressure Sensor 5V Reference	I	—
11	0.5	D-BU / WH	890	Fuel Tank Pressure Sensor Signal	I	—
12	0.5	BN / RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—
13	0.5	D-BU / VT	1589	Primary Fuel Level Sensor Signal	I	—
14	—	—	—	Not Occupied	—	—
15	0.5	WH	4499	High Speed GMLAN Serial Data [-] 7	I	—
16	0.5	VT / L-GN	4320	Powertrain Sensor Bus Enable	I	—
17	0.5	VT	2739	Run/Crank Ignition 1 Voltage	I	—
18	0.5	L-GN / GY	465	Fuel Pump Primary Relay Control	I	—
19 - 20	—	—	—	Not Occupied	—	—
21	0.5	WH	1310	EVAP Vent Solenoid Valve Control	II	—
22	2.5	BK	2150	Ground	II	—
23	0.5	BK	7444	Fuel Pump Assembly Shield Ground	II	—
24	2.5	WH / BN	4138	Fuel Pump Supply Voltage Phase 3	II	—

K111 Fuel Pump Driver Control Module (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	0.5	BK / BN	6284	Fuel Tank Pressure Sensor Low Reference	I	—
26	0.5	D-BU / WH	7446	Fuel Pressure Sensor Signal	I	—
27	0.5	BK / YE	7447	Fuel Pressure Sensor Low Reference	I	—
28	0.5	BK / L-GN	6281	Fuel Level Sensor Low Reference	I	—
29	—	—	—	Not Occupied	—	—
30	0.5	D-BU / BN	4498	High Speed GMLAN Serial Data [+] 7	I	—

K182 Parking Assist Control Module X1



1664569

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13784026
Service Connector: 13525987
Description: 12-Way F 0.64 Series(BK)

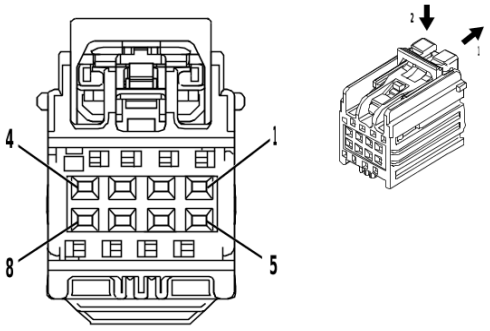
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575550	J-35616-64B (L-BU)	J-38125-559

K182 Parking Assist Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD / WH	840	Battery Positive Voltage	I	—
2 - 5	—	—	—	Not Occupied	—	—
6	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
7	0.5	BK / WH	351	Signal Ground	I	—
8 - 12	—	—	—	Not Occupied	—	—

K182 Parking Assist Control Module X2



4280711

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33183559
Service Connector: 19355209
Description: 8-Way F Kaizen Series(GY)

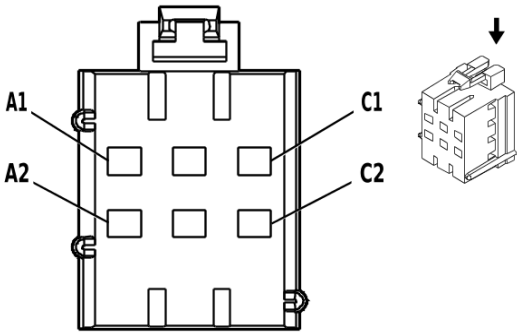
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

K182 Parking Assist Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE / VT	2378	Right Rear Outer Parking Assist Sensor Signal	I	—
2	0.5	YE / WH	2377	Right Rear Middle Parking Assist Sensor Signal	I	—
3	0.5	YE / D-BU	2376	Left Rear Middle Parking Assist Sensor Signal	I	—
4	0.5	BN / WH	2374	Object Sensor Voltage Reference	I	—
5	0.5	YE	2375	Left Rear Outer Parking Assist Sensor Signal	I	—
6 - 7	—	—	—	Not Occupied	—	—
8	0.5	BK / GY	2379	Object Sensor Low Reference	I	—

KR32B Blower Motor High Speed Relay - Auxiliary



309518

Connector Part Information

Harness Type: Auxiliary Heater and Air Conditioning Wiring Harness
OEM Connector: 12129715
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Flexlock Series(GY)

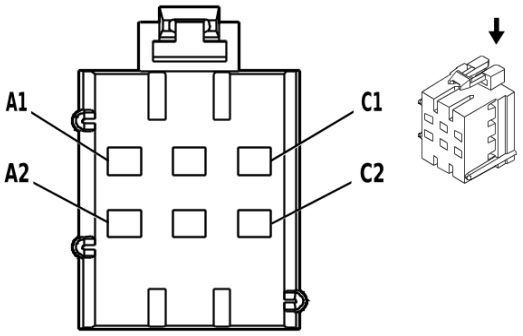
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

KR32B Blower Motor High Speed Relay - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.35	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
A2	5	YE	1172	Auxiliary Blower Motor Control	I	—
B1 - B2	—	—	—	Not Occupied	—	—
C1	5	RD / WH	1740	Battery Positive Voltage	I	—
C2	0.35	BN	341	Run Ignition 3 Voltage	I	—

KR32C Blower Motor Low Speed Relay - Auxiliary



309518

Connector Part Information

Harness Type: Auxiliary Heater and Air Conditioning Wiring Harness
OEM Connector: 12129715
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Flexlock Series(GY)

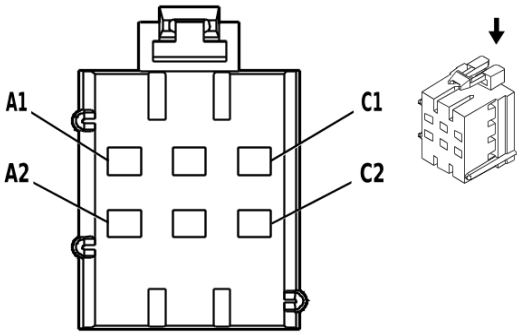
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

KR32C Blower Motor Low Speed Relay - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.35	D-BU	1926	Auxiliary Blower Motor Low Speed Control 2	I	—
A2	3	YE	1176	Auxiliary Blower Motor Low Speed Control	I	—
B1 - B2	—	—	—	Not Occupied	—	—
C1	5	RD / WH	1740	Battery Positive Voltage	I	—
C2	0.35	BN	341	Run Ignition 3 Voltage	I	—

KR32D Blower Motor Medium Speed Relay - Auxiliary



309518

Connector Part Information

Harness Type: Auxiliary Heater and Air Conditioning Wiring Harness
OEM Connector: 12129715
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Flexlock Series(GY)

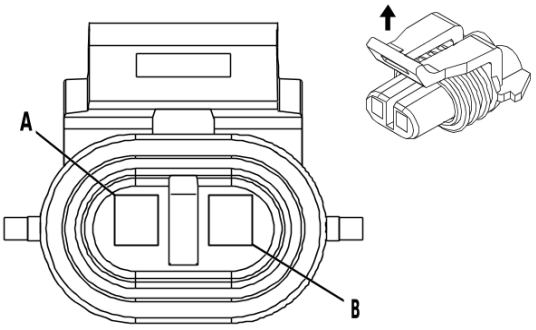
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

KR32D Blower Motor Medium Speed Relay - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.35	OG	1925	Auxiliary Blower Motor Medium Speed Control 2	I	—
A2	3	L-BU	1072	Auxiliary Blower Motor Medium Speed Control	I	—
B1 - B2	—	—	—	Not Occupied	—	—
C1	5	RD / WH	1740	Battery Positive Voltage	I	—
C2	0.35	BN	341	Run Ignition 3 Voltage	I	—

KR81 Auxiliary Battery Relay 1 X1



635009

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 12052641
Service Connector: 13586114
Description: 2-Way F 150 Metri-Pack Series, Sealed(BK)

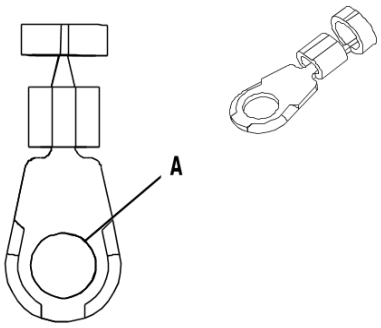
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

KR81 Auxiliary Battery Relay 1 X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	RD / WH	4892	Auxiliary Battery Relay Control	I	—
B	0.75	BK / WH	1551	Signal Ground	I	—

KR81 Auxiliary Battery Relay 1 X2



3385519

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 12146365
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

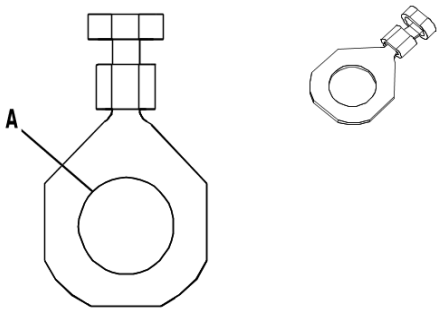
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

KR81 Auxiliary Battery Relay 1 X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—

KR81 Auxiliary Battery Relay 1 X3 (9L7)



3240148

Connector Part Information

Harness Type: Accessory Wiring Harness
OEM Connector: 12103504
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

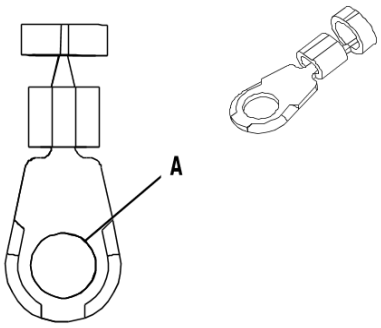
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

KR81 Auxiliary Battery Relay 1 X3 (9L7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	RD	102	Battery Positive Voltage	I	—

KR81 Auxiliary Battery Relay 1 X3 (L8T)



3385519

Connector Part Information

Harness Type: Auxiliary Battery Positive Cable
OEM Connector: 12146365
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

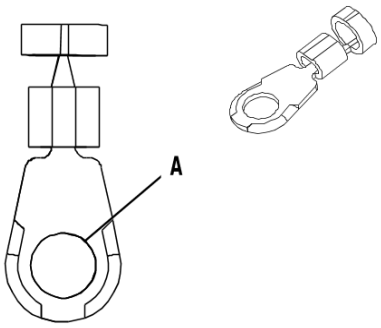
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

KR81 Auxiliary Battery Relay 1 X3 (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—

KR81 Auxiliary Battery Relay 1 X3 (LV1)



3385519

Connector Part Information

Harness Type: Auxiliary Battery Positive Cable
OEM Connector: 12146365
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

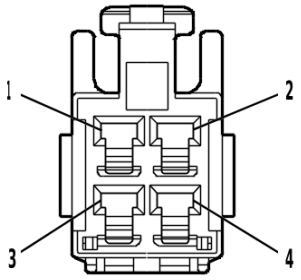
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

KR81 Auxiliary Battery Relay 1 X3 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—

M2A Access Panel Unlatch Actuator - Left Front Side Front



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series(BU)

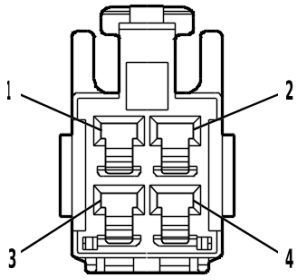
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-18 (BK)	No Tool Required

M2A Access Panel Unlatch Actuator - Left Front Side Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	—	TN	294	Door Lock Actuator Unlock Control	I	—
4	—	BK	750	Ground	I	—

M2B Access Panel Unlatch Actuator - Left Front Side Rear



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series(BU)

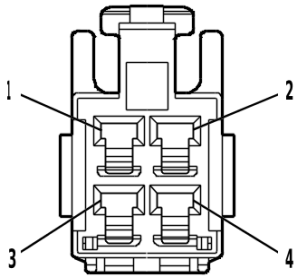
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-18 (BK)	No Tool Required

M2B Access Panel Unlatch Actuator - Left Front Side Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	—	TN	294	Door Lock Actuator Unlock Control	I	—
4	—	BK	750	Ground	I	—

M2C Access Panel Unlatch Actuator - Left Rear Side Front



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series(BU)

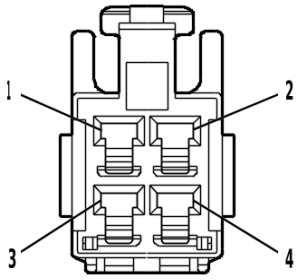
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-18 (BK)	No Tool Required

M2C Access Panel Unlatch Actuator - Left Rear Side Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	—	PK	1092	Left Rear Door Lock Actuator Unlock Control	I	—
4	—	BK	750	Ground	I	—

M2D Access Panel Unlatch Actuator - Left Rear Side Rear



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series(BU)

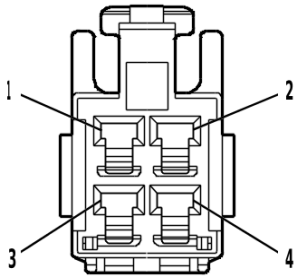
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-18 (BK)	No Tool Required

M2D Access Panel Unlatch Actuator - Left Rear Side Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	—	PK	1092	Left Rear Door Lock Actuator Unlock Control	I	—
4	—	BK	750	Ground	I	—

M2E Access Panel Unlatch Actuator - Right Side Front



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series(BU)

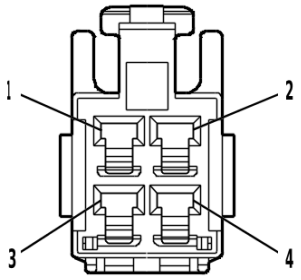
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-18 (BK)	No Tool Required

M2E Access Panel Unlatch Actuator - Right Side Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	—	TN / BK	1095	Right Rear Door Lock Actuator Unlock Control	I	—
4	—	BK	750	Ground	I	—

M2F Access Panel Unlatch Actuator - Right Side Rear



4569115

Connector Part Information

Harness Type: Rear Body
OEM Connector: 7283-1040-90
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 090 II Series(BU)

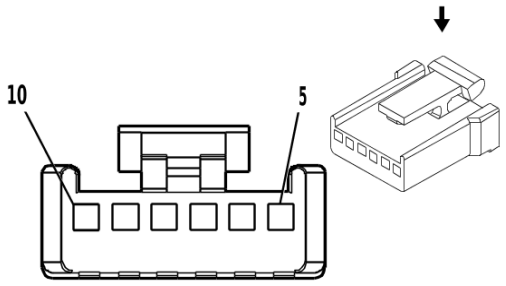
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-18 (BK)	No Tool Required

M2F Access Panel Unlatch Actuator - Right Side Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	—	TN / BK	1095	Right Rear Door Lock Actuator Unlock Control	I	—
4	—	BK	750	Ground	I	—

M6 Air Temperature Door Actuator



281207

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12040953
Service Connector: 12102632
Description: 6-Way F 100 Micro-Pack Series(BK)

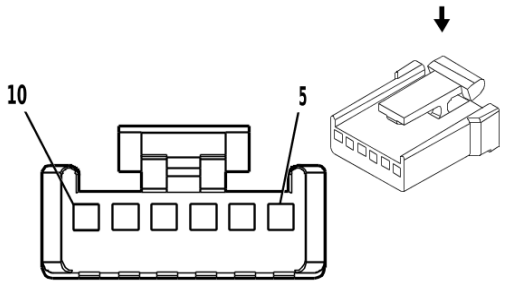
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-6 (BN)	No Tool Required

M6 Air Temperature Door Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5 - 6	—	—	—	Not Occupied	—	—
7	1	BK	550	Ground	I	—
8	0.8	L-BU	733	Air Temperature Door Position Signal	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	BN	341	Run Ignition 3 Voltage	I	—

M6B Air Temperature Door Actuator - Auxiliary



281207

Connector Part Information

Harness Type: Auxiliary Heater and Air Conditioning Wiring Harness
OEM Connector: 12040953
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 100 Micro-Pack Series(BK)

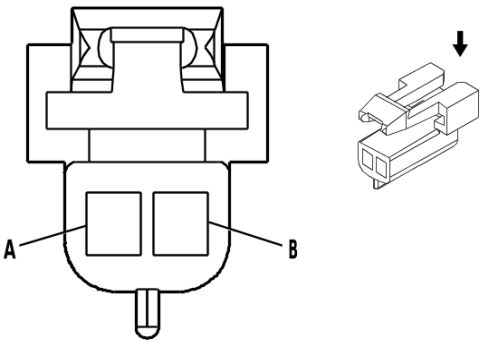
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-6 (BN)	No Tool Required

M6B Air Temperature Door Actuator - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5 - 6	—	—	—	Not Occupied	—	—
7	0.35	BK	850	Ground	I	—
8	0.35	OG	2775	Rear Air Temperature Door Actuator Control	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	BN	341	Run Ignition 3 Voltage	I	—

M7 Transmission Shift Lock Control Solenoid Actuator



280768

Connector Part Information

Harness Type: Steering Column
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

M7 Transmission Shift Lock Control Solenoid Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	TN / WH	816	Brake Transmission Shift Interlock Solenoid Actuator Control	I	—
B	—	BK	350	Ground	I	—

M8 Blower Motor

—

Connector Part Information

Harness Type: HVAC
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

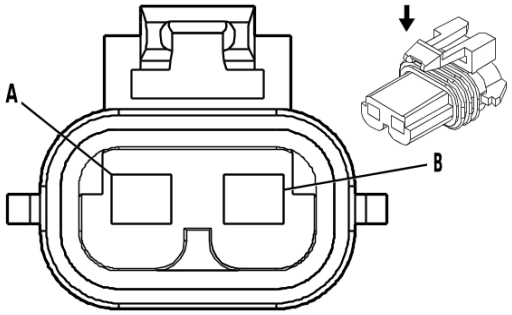
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M8 Blower Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	1250	Ground	I	—
B	—	RD	65	Blower Motor Control	I	—

M8B Blower Motor - Auxiliary



684799

Connector Part Information

Harness Type: Auxiliary Heater and Air Conditioning Wiring Harness
OEM Connector: 12077900
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

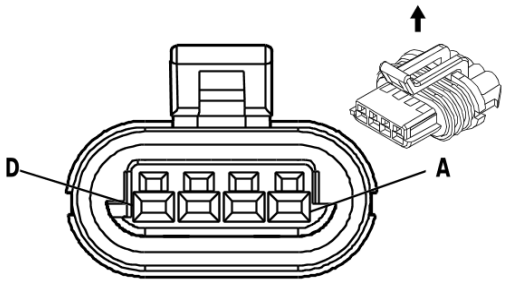
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M8B Blower Motor - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	BK	850	Ground	I	—
B	5	YE	1172	Auxiliary Blower Motor Control	I	—

M13 Door Latch Assembly - Rear Cargo X1



655858

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 15336846
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 GT Series, Sealed(BU)

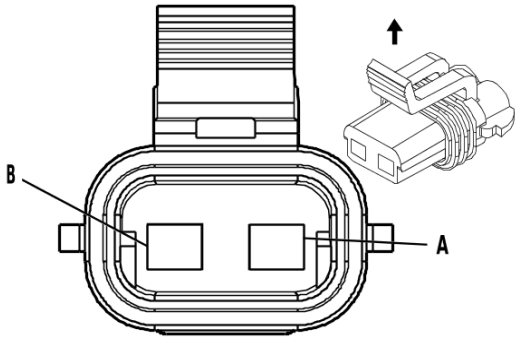
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

M13 Door Latch Assembly - Rear Cargo X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK / WH	1051	Signal Ground	I	—
B	—	—	—	Not Occupied	—	—
C	0.35	PK / BK	1303	Liftgate Ajar Switch Signal 1	I	—
D	0.35	L-GN	5926	Rear Body Opening Open Switch Signal	I	—

M13 Door Latch Assembly - Rear Cargo X2



68721

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

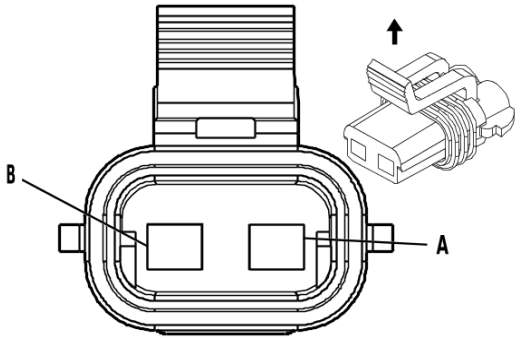
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M13 Door Latch Assembly - Rear Cargo X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	TN / BK	1095	Right Rear Door Lock Actuator Unlock Control	I	—
B	1	GY	295	Door Lock Actuator Lock Control	I	—

M14RR Door Lock Actuator - Right Rear (E24)



68721

Connector Part Information

Harness Type: Rear Side Door Wiring Harness
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

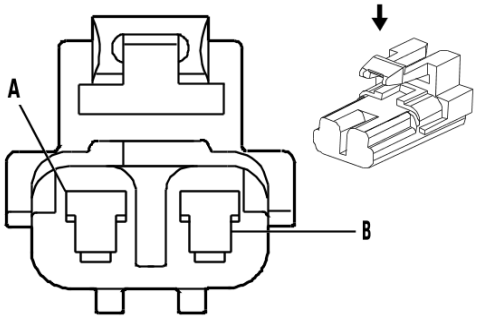
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M14RR Door Lock Actuator - Right Rear (E24)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	0.8	GY	295	Door Lock Actuator Lock Control	I	—

M14RR Door Lock Actuator - Right Rear (YA2)



62488

Connector Part Information

Harness Type: Rear Side Door Wiring Harness
OEM Connector: 12084957
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series(BK)

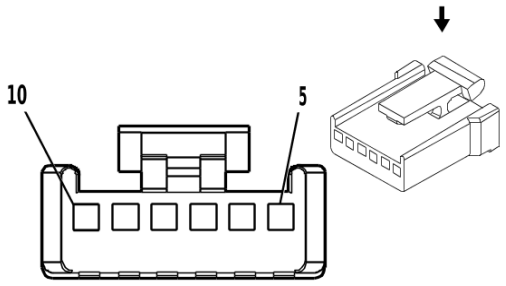
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M14RR Door Lock Actuator - Right Rear (YA2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	GY	295	Door Lock Actuator Lock Control	I	—
B	0.8	TN	294	Door Lock Actuator Unlock Control	I	—

M37B Mode Door Actuator - Auxiliary



281207

Connector Part Information

Harness Type: Auxiliary Heater and Air Conditioning Wiring Harness
OEM Connector: 12040953
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 100 Micro-Pack Series(BK)

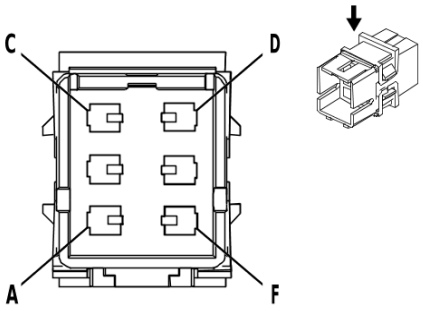
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-6 (BN)	No Tool Required

M37B Mode Door Actuator - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5 - 6	—	—	—	Not Occupied	—	—
7	0.35	BK	850	Ground	I	—
8	0.35	GY	2599	Rear Mode Door Actuator Signal	I	—
9	—	—	—	Not Occupied	—	—
10	0.35	BN	341	Run Ignition 3 Voltage	I	—

M49D Seat Motor Assembly - Driver (AG1)



2684011

Connector Part Information

Harness Type: Driver Seat Motor Jumper
OEM Connector: 12015345
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M Weather Pack Series, Sealed(BK)

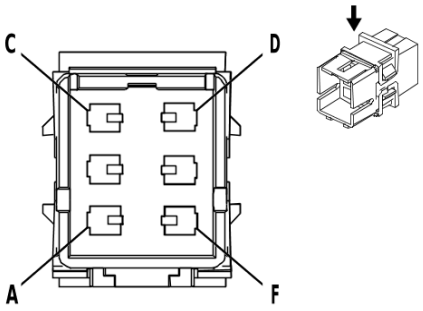
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M49D Seat Motor Assembly - Driver (AG1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	YE	282	Driver Seat Rear Vertical Motor Up Control	I	—
B	—	L-BU	283	Driver Seat Rear Vertical Motor Down Control	I	—
C	—	TN	285	Driver Seat Horizontal Motor Forward Control	I	—
D	—	L-GN	284	Driver Seat Horizontal Motor Rearward Control	I	—
E	—	D-GN	286	Driver Seat Front Vertical Motor Up Control	I	—
F	—	D-BU	287	Driver Seat Front Vertical Motor Down Control	I	—

M49P Seat Motor Assembly - Passenger (AG2)



2684011

Connector Part Information

Harness Type: Passenger Seat Motor Jumper
OEM Connector: 12015345
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M Weather Pack Series, Sealed(BK)

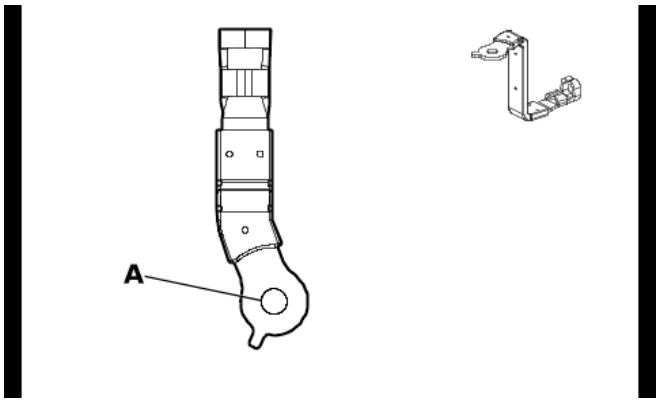
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M49P Seat Motor Assembly - Passenger (AG2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	YE	288	Passenger Seat Rear Vertical Motor Up Control	I	—
B	—	L-BU	289	Passenger Seat Rear Vertical Motor Down Control	I	—
C	—	TN	296	Passenger Seat Horizontal Motor Forward Control	I	—
D	—	L-GN	290	Passenger Seat Horizontal Motor Rearward Control	I	—
E	—	D-GN	297	Passenger Seat Front Vertical Motor Up Control	I	—
F	—	D-BU	298	Passenger Seat Front Vertical Motor Down Control	I	—

M64 Starter Motor X1 (L8T+TP3)



6056268

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 35592444
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

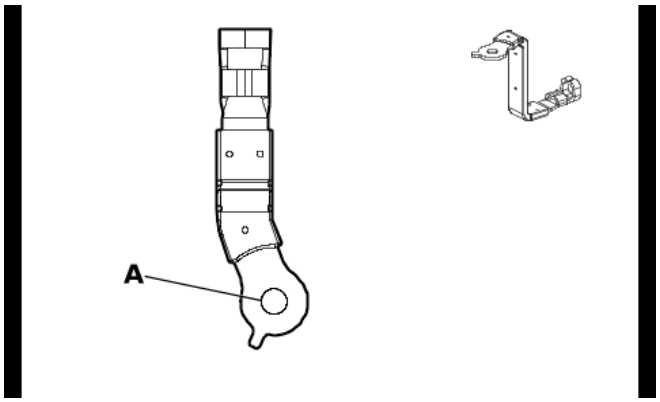
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M64 Starter Motor X1 (L8T+TP3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—
	32	RD	1	Unfused Battery Positive Voltage		—

M64 Starter Motor X1 (L8T-TP3)



6056268

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 35592441
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

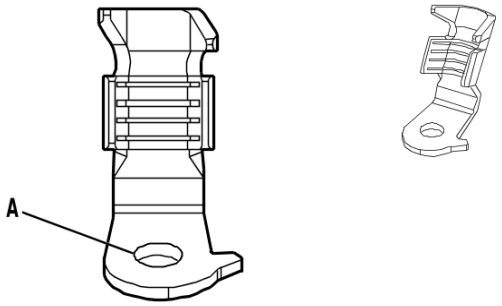
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M64 Starter Motor X1 (L8T-TP3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	32	RD	1	Unfused Battery Positive Voltage	I	—

M64 Starter Motor X1 (LV1)



4937583

Connector Part Information

Harness Type: Battery Positive Cable
OEM Connector: 35116268
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M64 Starter Motor X1 (LV1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	13	RD	1	Unfused Battery Positive Voltage	I	—
	32	RD	1	Unfused Battery Positive Voltage		—

M64 Starter Motor X2

—

Connector Part Information

Harness Type: Starter Motor Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

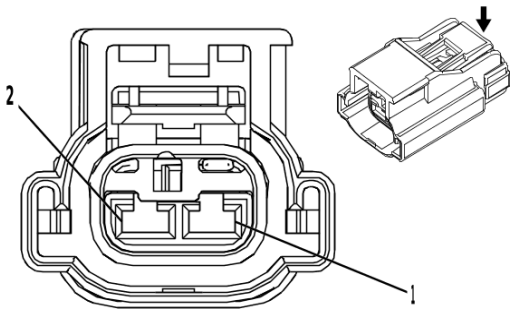
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

M64 Starter Motor X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE	6	Starter Solenoid Crank Ignition Voltage	I	—

M74D Window Motor - Driver



3372003

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 13896059
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed(BK)

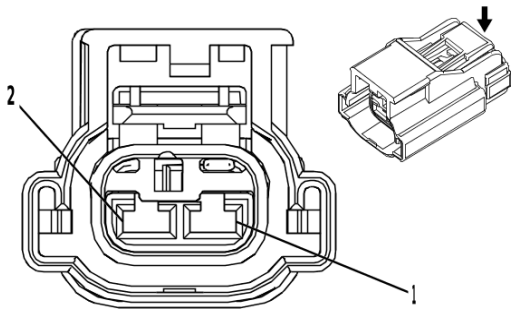
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M74D Window Motor - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	D-BU	164	Left Front Window Motor Up Control	I	—
2	3	BN	165	Left Front Window Motor Down Control	I	—

M74P Window Motor - Passenger



3372003

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 13896059
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed(BK)

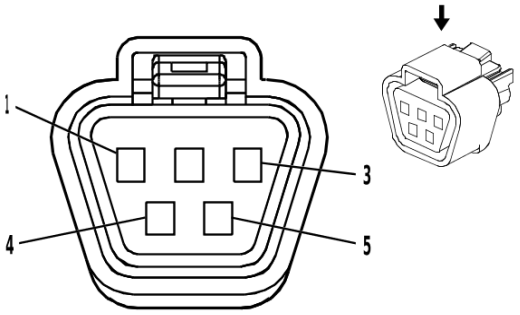
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

M74P Window Motor - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	D-BU	666	Right Front Window Motor Up Control	I	—
2	3	BN	667	Right Front Window Motor Down Control	I	—

M75 Windshield Wiper Motor



1715213

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15316488
Service Connector: 13587179
Description: 5-Way F 090 Series, Sealed(BK)

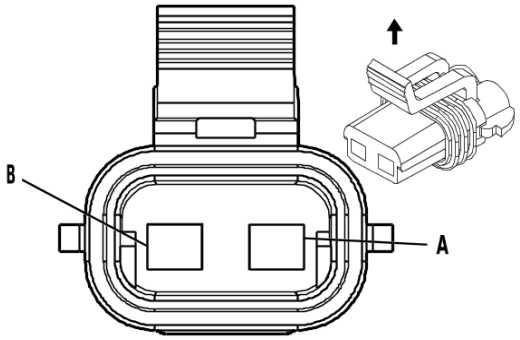
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-18 (BK)	No Tool Required

M75 Windshield Wiper Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	D-GN	95	Windshield Wiper Motor Low Speed Control	II	—
2	0.35	BK / WH	351	Signal Ground	I	—
3	0.35	YE	196	Windshield Wiper Motor Park Switch Signal	I	—
4	2	PU	92	Windshield Wiper Motor High Speed Control	II	—
5	2	BK	1250	Ground	II	—

P3 Backup Alarm (-Cutaway)



68721

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

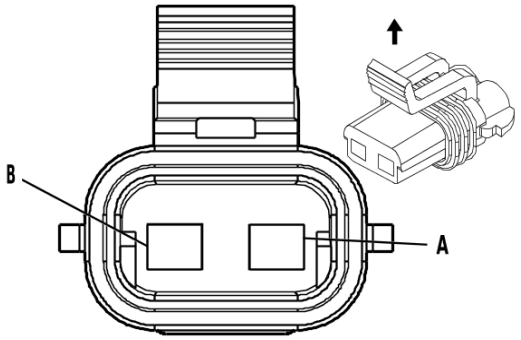
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

P3 Backup Alarm (-Cutaway)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	L-GN	1624	Trailer Backup Lamp Control	I	—
B	1	BK	150	Ground	I	—

P3 Backup Alarm (Cutaway)



68721

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness
OEM Connector: 15300027
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

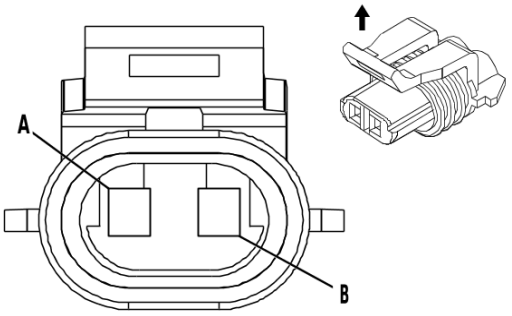
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

P3 Backup Alarm (Cutaway)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	L-GN	1624	Trailer Backup Lamp Control	I	—
B	1	BK	150	Ground	I	—

P13 Horn Assembly



537107

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 12052644
Service Connector: 19368034
Description: 2-Way F 150 Metri-Pack Series, Sealed(GY)

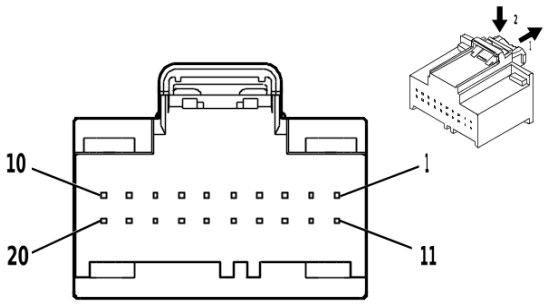
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P13 Horn Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	BK	1250	Ground	I	—
B	1	BN / GY	29	Horn Control	I	—

P16 Instrument Cluster



5112891

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 35160140
Service Connector: 13525990
Description: 20-Way F 0.64 Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584547	J-35616-64B (L-BU)	J-38125-215A

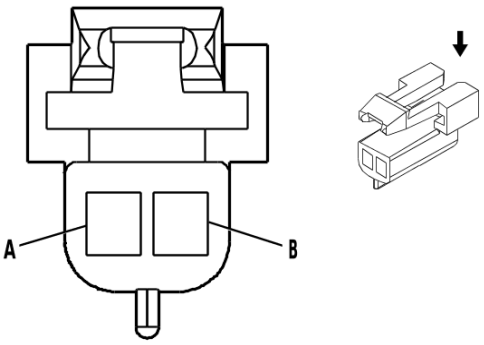
P16 Instrument Cluster

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BN / WH	419	Check Engine Indicator Control	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	GY / YE	3885	Forward Collision Alert LED Control	I	—
7	0.35	BK / WH	351	Signal Ground	I	—
8	0.35	WH / L-GN	3535	Reflected LED Display Dimming Control	I	—
9	—	—	—	Not Occupied	—	—
10	0.5	D-BU / GY	636	Ambient Air Temperature Sensor Signal	I	—
11	0.5	BK / D-BU	61	Ambient Air Temperature Sensor Low Reference	I	—
12	0.35	D-BU	2307	Passenger Air Bag On Indicator Control	I	—
13	0.35	D-GN	2308	Passenger Air Bag Off Indicator Control	I	—
14	0.5	TN / WH	33	Brake Warning Indicator Control	I	—
15	0.75	L-GN / GY	333	Brake Fluid Level Signal	I	—
16	0.35	PK	893	Driver Information Center Select Menu Switch Signal	I	—
17	0.35	D-GN / WH	1358	Driver Information Center Switch Signal	I	—
18	0.35	BN	897	Driver Information Center Switch Low Reference	I	—
19	0.35	PK	1639	Run/Crank Ignition 1 Voltage	I	—

P16 Instrument Cluster (cont'd)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
20	0.5	RD / WH	2840	Battery Positive Voltage	I	8S8
	0.35	RD / WH	2840	Battery Positive Voltage	I	- 8S8

P19AG Speaker - Left Front Door



280768

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

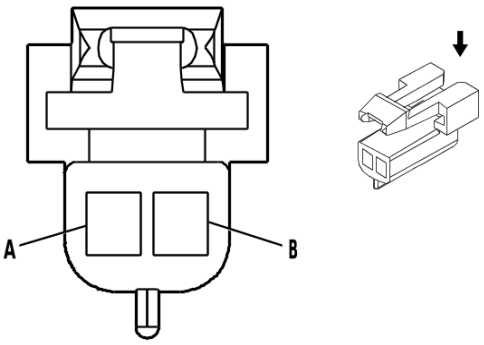
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AG Speaker - Left Front Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	L-BU	1957	Left Front Midrange Speaker [-] Control	I	—
B	0.8	D-BU	1857	Left Front Midrange Speaker [+] Control	I	—

P19AH Speaker - Right Front Door



280768

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

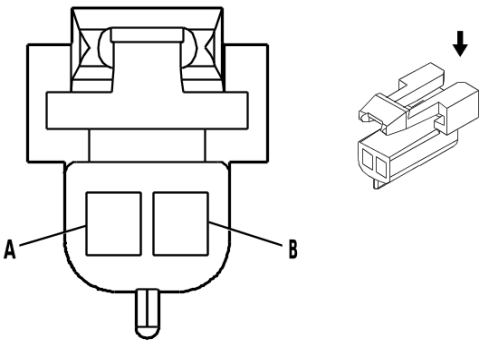
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19AH Speaker - Right Front Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	D-GN	1953	Right Front Midrange Speaker [-] Control	I	—
B	0.8	OG	1853	Right Front Midrange Speaker [+] Control	I	—

P19F Speaker - Left Rear Cargo Door



280768

Connector Part Information

Harness Type: Rear Door Door Wiring Harness - Left
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

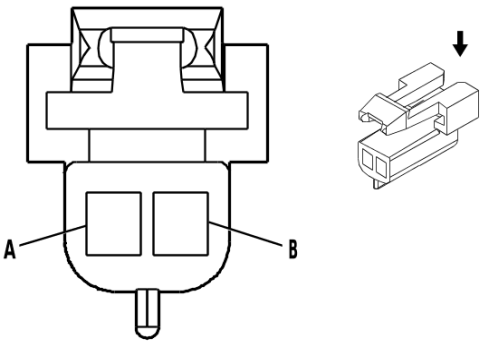
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19F Speaker - Left Rear Cargo Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	WH	1959	Left Rear Midrange Speaker [-] Control	I	—
B	1	TN	1859	Left Rear Midrange Speaker [+] Control	I	—

P19LR Speaker - Left Rear Roof



280768

Connector Part Information

Harness Type: Radio Rear Speaker Wiring Harness
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

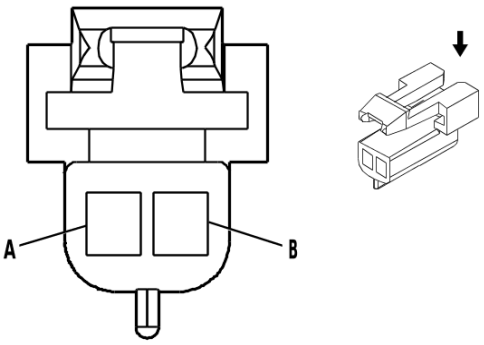
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19LR Speaker - Left Rear Roof

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	WH	1959	Left Rear Midrange Speaker [-] Control	I	—
B	1	TN	1859	Left Rear Midrange Speaker [+] Control	I	—

P19RR Speaker - Right Rear Roof



280768

Connector Part Information

Harness Type: Radio Rear Speaker Wiring Harness
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

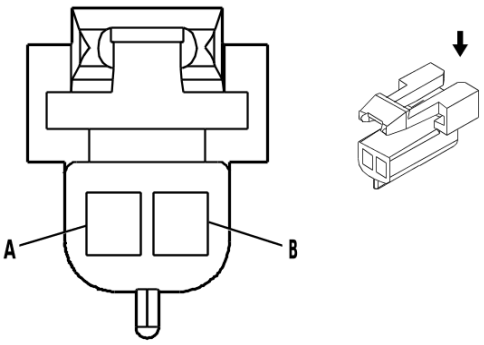
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19RR Speaker - Right Rear Roof

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	OG	1955	Right Rear Midrange Speaker [-] Control	I	—
B	1	TN	1855	Right Rear Midrange Speaker [+] Control	I	—

P19T Speaker - Right Rear Cargo Door



280768

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 12052832
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

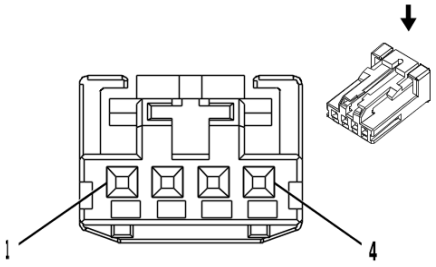
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

P19T Speaker - Right Rear Cargo Door

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	OG	1955	Right Rear Midrange Speaker [-] Control	I	—
B	1	TN	1855	Right Rear Midrange Speaker [+] Control	I	—

P43 Collision Alert Indicators



2717162

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13969166
Service Connector: 19367524
Description: 4-Way F 0.64 Micro-Quadlock Series(BK)

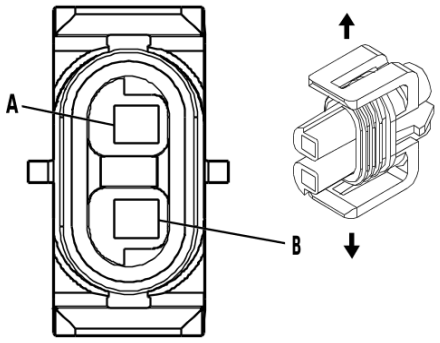
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

P43 Collision Alert Indicators

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / BK	1639	Run/Crank Ignition 1 Voltage	I	—
2	0.35	GY / YE	3885	Forward Collision Alert LED Control	I	—
3	0.35	WH / L-GN	3535	Reflected LED Display Dimming Control	I	—
4	0.5	BK / WH	2151	Signal Ground	I	—

Q2 A/C Compressor Clutch



684852

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 12162017
Service Connector: 12101937
Description: 2-Way F 150 Metri-Pack Series, Sealed(GY)

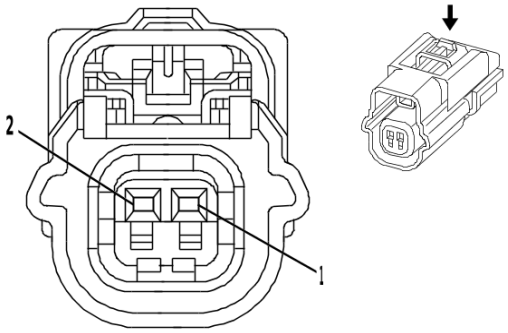
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

Q2 A/C Compressor Clutch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	BK	1250	Ground	I	—
B	0.5	BN / L-GN	59	A/C Compressor Clutch Control	I	—

Q6 Camshaft Position Actuator Solenoid Valve



1664592

Connector Part Information

Harness Type: Camshaft Position Actuator Solenoid Valve Jumper
OEM Connector: 89047381
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Kaizen Series, Sealed(BK)

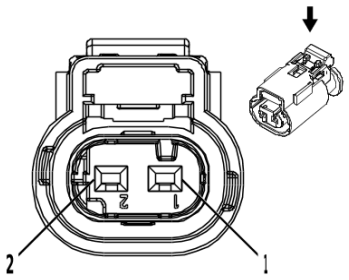
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q6 Camshaft Position Actuator Solenoid Valve

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK / BN	6753	Camshaft Position Actuator Solenoid Valve W Low Reference	I	—
2	—	VT / BN	5284	Intake Camshaft Position Actuator Solenoid Valve 1	I	—

Q12 Evaporative Emission Purge Solenoid Valve



2717066

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed(BK)

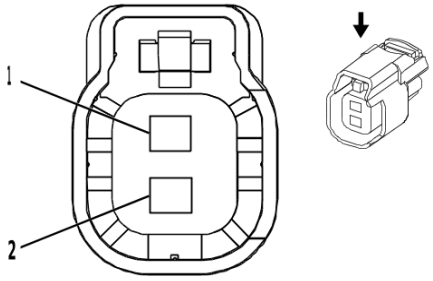
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-12 (BU)	No Tool Required

Q12 Evaporative Emission Purge Solenoid Valve

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT / WH	1939	Run/Crank Ignition 1 Voltage	I	—
2	0.5	L-GN / D-BU	428	EVAP Canister Purge Solenoid Control	I	—

Q13 Evaporative Emission Vent Solenoid Valve



2422378

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13771883
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

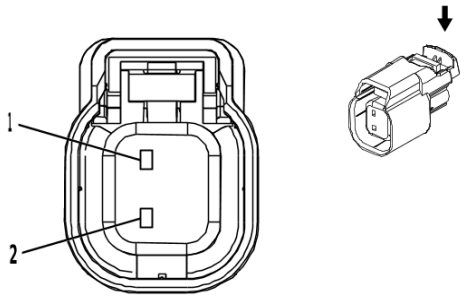
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

Q13 Evaporative Emission Vent Solenoid Valve

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	1310	EVAP Vent Solenoid Valve Control	I	—
2	0.5	RD / L-GN	40	Battery Positive Voltage	I	—

Q17A Fuel Injector 1



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

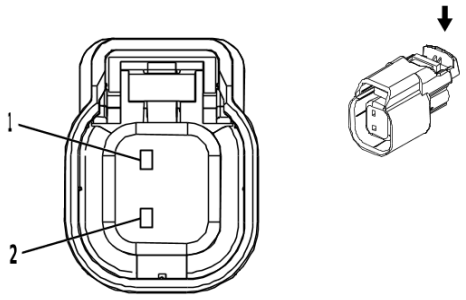
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q17A Fuel Injector 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN / WH	4901	Direct Fuel Injector High Voltage Supply Cylinder 1	I	—
2	—	BN	4801	Direct Fuel Injector High Voltage Control Cylinder 1	I	—

Q17B Fuel Injector 2



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

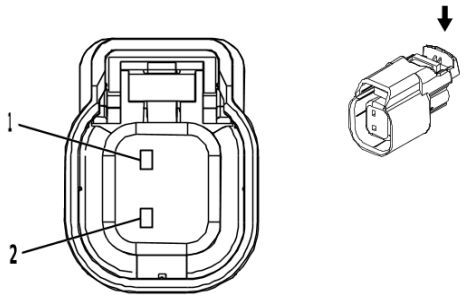
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q17B Fuel Injector 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	D-BU / GY	4902	Direct Fuel Injector High Voltage Supply Cylinder 2	I	—
2	—	D-BU	4802	Direct Fuel Injector High Voltage Control Cylinder 2	I	—

Q17C Fuel Injector 3



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

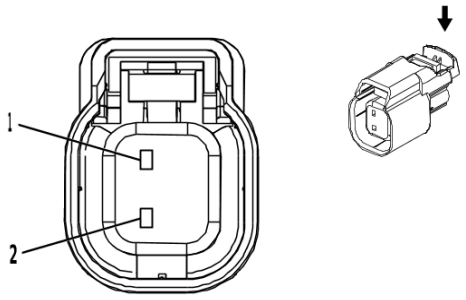
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q17C Fuel Injector 3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	L-GN / GY	4903	Direct Fuel Injector High Voltage Supply Cylinder 3	I	—
2	—	L-GN	4803	Direct Fuel Injector High Voltage Control Cylinder 3	I	—

Q17D Fuel Injector 4



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

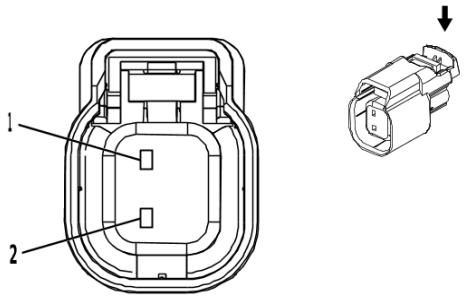
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q17D Fuel Injector 4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	D-BU / WH	4904	Direct Fuel Injector High Voltage Supply Cylinder 4	I	—
2	—	GY / D-BU	4804	Direct Fuel Injector High Voltage Control Cylinder 4	I	—

Q17E Fuel Injector 5



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

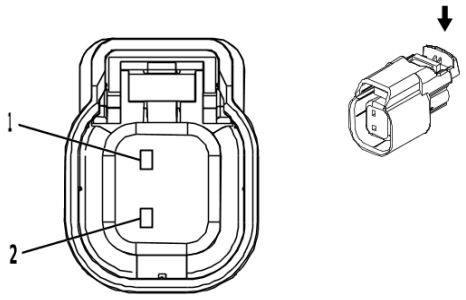
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q17E Fuel Injector 5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	L-GN / WH	4905	Direct Fuel Injector High Voltage Supply Cylinder 5	I	—
2	—	WH / L-GN	4805	Direct Fuel Injector High Voltage Control Cylinder 5	I	—

Q17F Fuel Injector 6



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

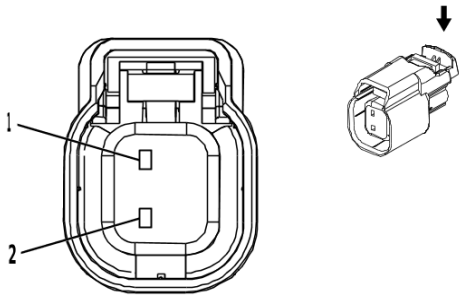
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q17F Fuel Injector 6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT / GY	4906	Direct Fuel Injector High Voltage Supply Cylinder 6	I	—
2	—	VT / L-GN	4806	Direct Fuel Injector High Voltage Control Cylinder 6	I	—

Q17G Fuel Injector 7 (L8T)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

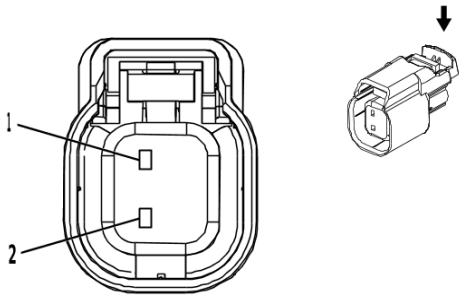
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q17G Fuel Injector 7 (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / YE	4907	Direct Fuel Injector High Voltage Supply Cylinder 7	I	—
2	—	YE / GY	4807	Direct Fuel Injector High Voltage Control Cylinder 7	I	—

Q17H Fuel Injector 8 (L8T)



2792100

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed(BK)

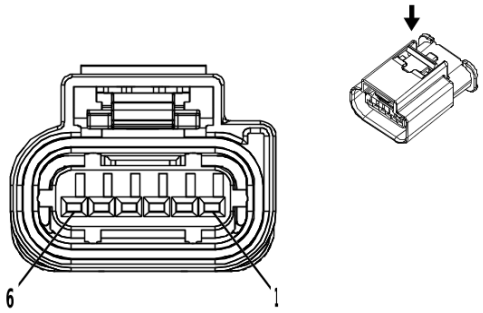
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q17H Fuel Injector 8 (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY / WH	4908	Direct Fuel Injector High Voltage Supply Cylinder 8	I	—
2	—	GY	4808	Direct Fuel Injector High Voltage Control Cylinder 8	I	—

Q38 Throttle Body



3747579

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed(BK)

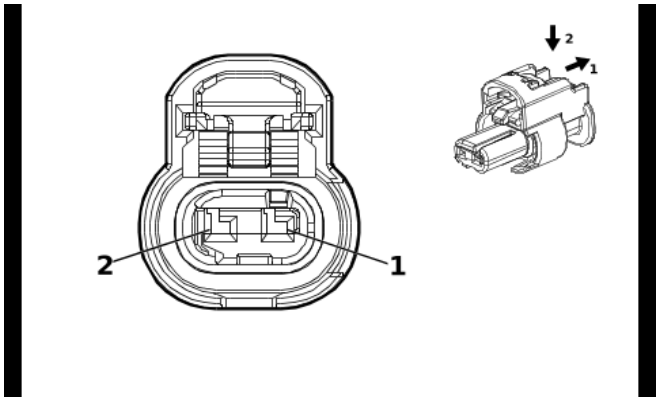
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required

Q38 Throttle Body

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	581	Throttle Actuator Open Control	I	—
2	0.5	BN / WH	582	Throttle Actuator Close Control	I	—
3	0.5	D-BU / WH	3630	Throttle Position Sensor SENT 1 Signal	I	—
4	0.5	BK / BN	2752	Throttle Position Sensor Low Reference	I	—
5	0.5	BN / RD	2701	Throttle Position Sensor 5V Reference	I	—
6	—	—	—	Not Occupied	—	—

Q44 Engine Oil Pressure Control Solenoid Valve (L8T)



4036662

Connector Part Information

Harness Type: Oil Pump Flow Control Solenoid Valve Wire Wiring Harness
OEM Connector: 1-2296704-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON-CB Series, Sealed(BK)

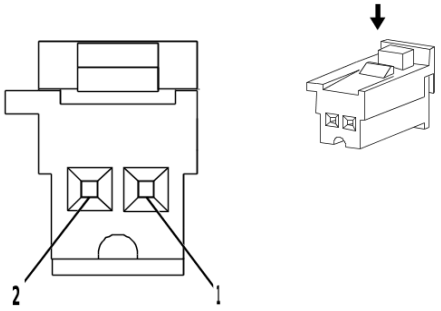
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q44 Engine Oil Pressure Control Solenoid Valve (L8T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	VT / D-BU	5293	Powertrain Main Relay Fused Supply Voltage 4	I	—
2	—	D-BU	179	Engine Oil Pump Control	I	—

Q77A Transmission Control Solenoid Valve 1 (M5U)



4051391

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series(VT)

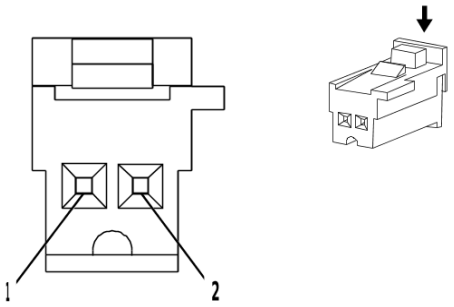
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q77A Transmission Control Solenoid Valve 1 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BN	6400	Clutch Solenoid Valve A Control	I	—
2	—	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77B Transmission Control Solenoid Valve 2 (M5U)



4008644

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series(GY)

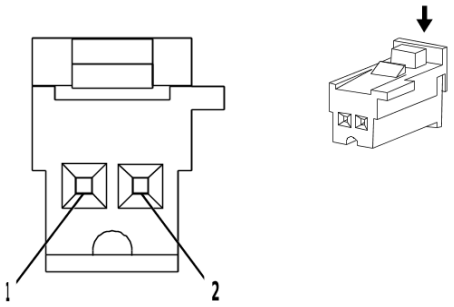
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q77B Transmission Control Solenoid Valve 2 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	D-BU	6401	Clutch Solenoid Valve B Control	I	—
2	—	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77C Transmission Control Solenoid Valve 3 (M5U)



4008644

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series(GY)

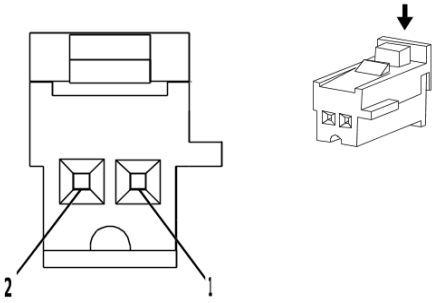
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q77C Transmission Control Solenoid Valve 3 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY	6402	Clutch Solenoid Valve C Control	I	—
2	—	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77D Transmission Control Solenoid Valve 4 (M5U)



4008636

Connector Part Information

Harness Type: Automatic Transmission Control Wiring Harness
OEM Connector: 13947283
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series(NA)

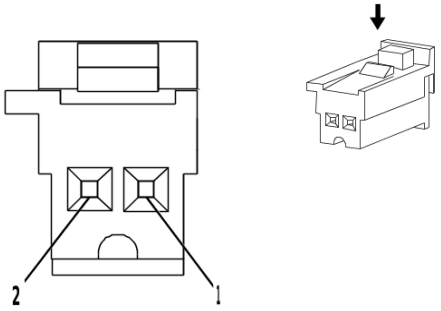
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q77D Transmission Control Solenoid Valve 4 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH	4508	Transmission Clutch G Control	I	—
2	—	L-GN / GY	6387	Transmission High Side Driver 1 Control	I	—

Q77E Transmission Control Solenoid Valve 5 (M5U)



4051391

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series(VT)

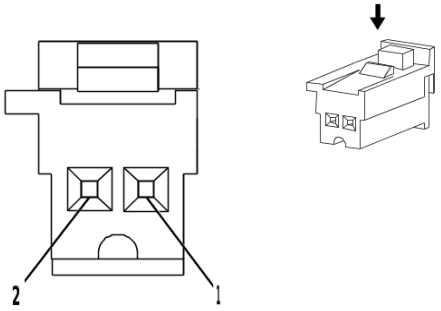
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q77E Transmission Control Solenoid Valve 5 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	WH / D-BU	4507	Transmission Clutch H Control	I	—
2	—	L-GN / GY	6387	Transmission High Side Driver 1 Control	I	—

Q77F Transmission Control Solenoid Valve 6 (M5U)



4051391

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series(VT)

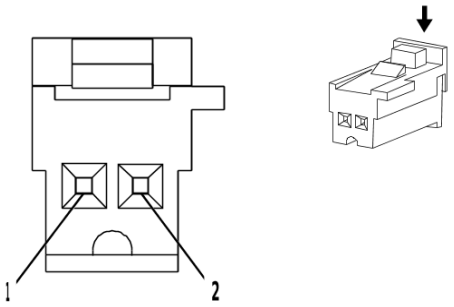
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q77F Transmission Control Solenoid Valve 6 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY / L-GN	6403	Clutch Solenoid Valve D Control	I	—
2	—	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77G Transmission Control Solenoid Valve 7 (M5U)



4008644

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series(GY)

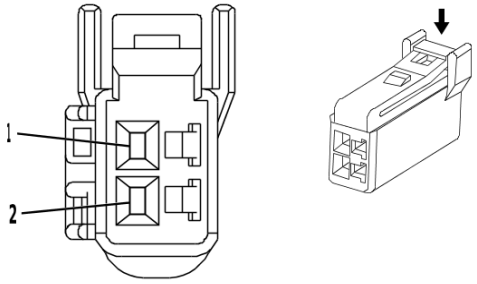
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q77G Transmission Control Solenoid Valve 7 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	YE / BN	6404	Clutch Solenoid Valve E Control	I	—
2	—	GY / BN	6388	Transmission High Side Driver 2 Control	I	—

Q77H Transmission Control Solenoid Valve 8 (M5U)



4051682

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series(NA)

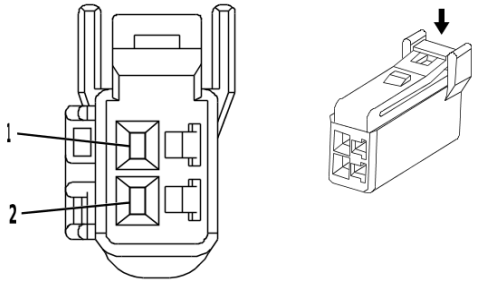
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q77H Transmission Control Solenoid Valve 8 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	L-GN / GY	6387	Transmission High Side Driver 1 Control	I	—
2	—	L-GN / WH	6380	Torque Converter Clutch Enable Solenoid Valve A Control	I	—

Q77J Transmission Control Solenoid Valve 9 (M5U)



4051682

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series(NA)

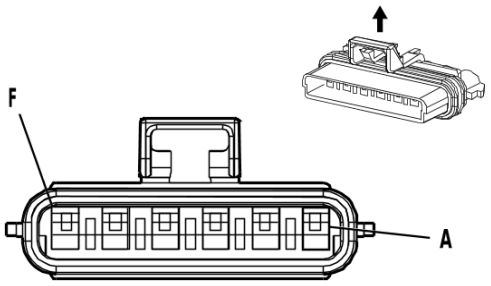
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

Q77J Transmission Control Solenoid Valve 9 (M5U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	GY / BN	6388	Transmission High Side Driver 2 Control	I	—
2	—	YE / BN	6210	Torque Converter Clutch Enable Solenoid Valve B Control	I	—

R3 Blower Motor Resistor



535914

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 12160746
Service Connector: 15306007
Description: 6-Way F 280 Metri-Pack Flexlock Series, Sealed(L-GY)

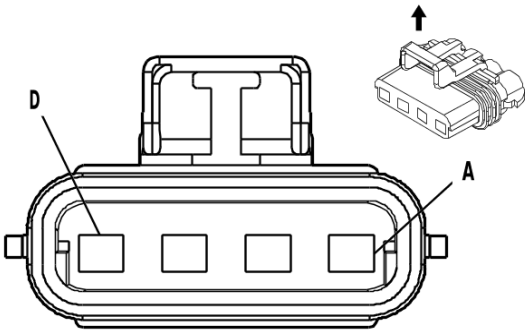
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

R3 Blower Motor Resistor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	5	RD / PU	542	Battery Positive Voltage	I	—
B	1	WH / BK	52	Blower Motor High Speed Control	I	—
C	4	BK	1250	Ground	I	—
D	1	YE / BN	63	Blower Motor Medium 1 Control	I	—
E	1	YE	60	Blower Motor Low Speed Control	I	—
F	2	D-BU / YE	72	Blower Motor Medium 2 Control	I	—

R3B Blower Motor Resistor - Auxiliary



697053

Connector Part Information

Harness Type: Auxiliary Heater and Air Conditioning Wiring Harness
OEM Connector: 12129566
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 280 Metri-Pack Series, Sealed(GY)

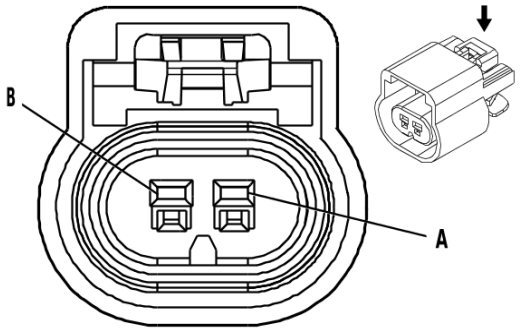
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

R3B Blower Motor Resistor - Auxiliary

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	YE	1176	Auxiliary Blower Motor Low Speed Control	I	—
B	—	—	—	Not Occupied	—	—
C	3	L-BU	1072	Auxiliary Blower Motor Medium Speed Control	I	—
D	3	YE	1172	Auxiliary Blower Motor Control	I	—

R6A Terminating Resistor - High Speed Bus



523630

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13510085
Service Connector: 87815146
Description: 2-Way F 150 GT Series, Sealed(BK)

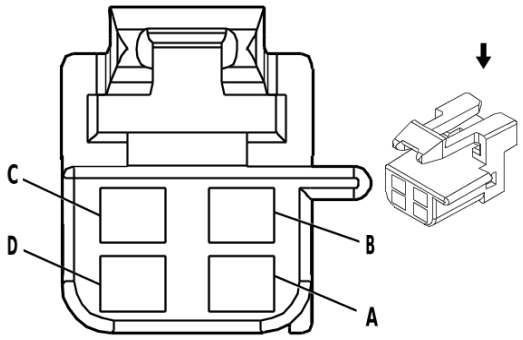
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

R6A Terminating Resistor - High Speed Bus

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
B	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—

S2 Transmission Manual Shift Switch



130637

Connector Part Information

Harness Type: Steering Column
OEM Connector: 12064760
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 Metri-Pack Series(BK)

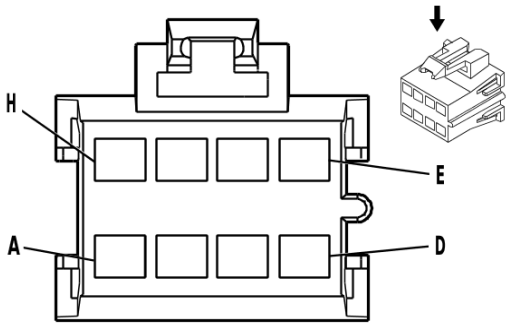
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S2 Transmission Manual Shift Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A - B	—	—	—	Not Occupied	—	—
C	—	PU	5526	Tap Up/Tap Down Switch Signal	I	—
D	—	PK	1444	12V Reference	I	—

S13A Door Lock Switch - Rear Cargo



62469

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 12064998
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 Metri-Pack Series(BK)

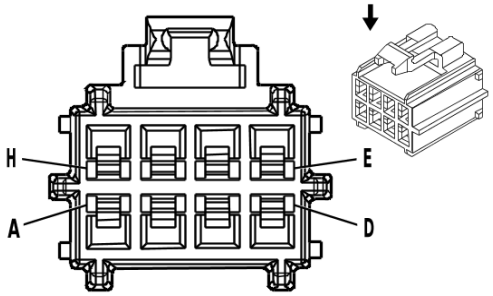
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S13A Door Lock Switch - Rear Cargo

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
B - C	—	—	—	Not Occupied	—	—
D	0.35	D-BU	245	Passenger Door Lock Switch Unlock Control	I	—
E	0.35	BK / WH	1051	Signal Ground	I	—
F - H	—	—	—	Not Occupied	—	—

S13D Door Lock Switch - Driver



851474

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15418533
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 GT Series(L-GN)

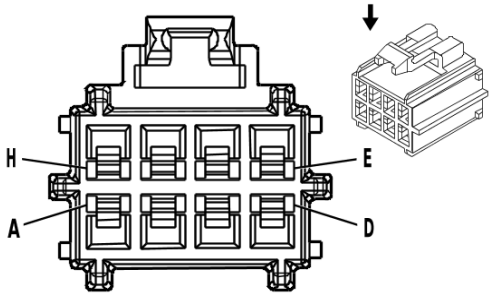
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S13D Door Lock Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	450	Ground	I	—
B	0.35	BK	450	Ground	I	—
C	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
D - E	—	—	—	Not Occupied	—	—
F	0.35	OG / BK	781	Driver Door Lock Switch Unlock Signal	I	—
G	0.35	PK / BK	780	Driver Door Lock Switch Lock Signal	I	—
H	—	—	—	Not Occupied	—	—

S13P Door Lock Switch - Passenger



851474

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 15418533
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 GT Series(L-GN)

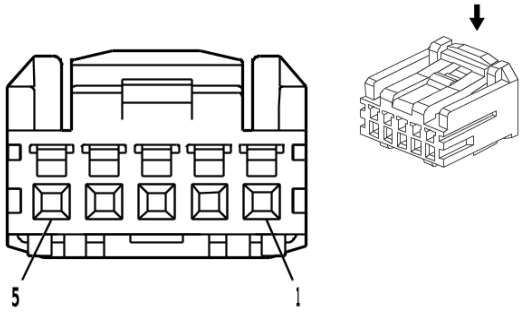
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S13P Door Lock Switch - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	1850	Ground	I	—
B	0.35	BK	1850	Ground	I	—
C	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
D - E	—	—	—	Not Occupied	—	—
F	0.35	D-BU	245	Passenger Door Lock Switch Unlock Control	I	—
G	0.35	L-BU	244	Passenger Door Lock Switch Lock Control	I	—
H	—	—	—	Not Occupied	—	—

S16 Driver Information Center Switch



1673494

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15491277
Service Connector: 88988747
Description: 5-Way F HCM Series(BK)

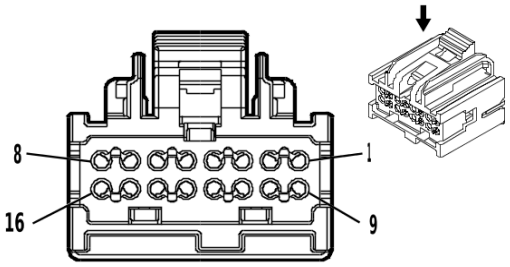
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-64B (L-BU)	No Tool Required

S16 Driver Information Center Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	D-GN / WH	1358	Driver Information Center Switch Signal	I	—
2	0.35	BN	897	Driver Information Center Switch Low Reference	I	—
3	0.35	PK	893	Driver Information Center Select Menu Switch Signal	I	—
4	0.5	YE	6817	LED Backlight Dimming Control 1	I	—
5	0.5	BK / WH	351	Signal Ground	I	—

S30 Headlamp Switch



2127936

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13568238
Service Connector: 13504130
Description: 16-Way F 64 Micro-Series(BK)

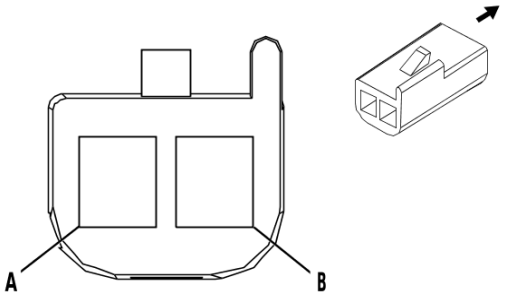
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579976	J-35616-64B (L-BU)	J-38125-21

S30 Headlamp Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH	103	Headlamp Switch On Signal	I	—
2	0.35	L-BU	13	Headlamp Switch Park Lamp Signal	I	—
3	0.35	D-GN	306	Headlamp Switch Off Signal	I	—
4 - 6	—	—	—	Not Occupied	—	—
7	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
8	0.5	BK / WH	351	Signal Ground	I	—
9	0.35	PU	328	Interior Lamp Defeat Switch Signal	I	—
10 - 11	—	—	—	Not Occupied	—	—
12	0.35	D-BU / WH	149	Courtesy Lamp Control	I	—
13	0.35	D-GN	44	Instrument Panel Lamp Dimmer Switch Signal	I	—
14	—	—	—	Not Occupied	—	—
15	0.35	OG / WH	812	12V Reference	I	—
16	—	—	—	Not Occupied	—	—

S33 Horn Switch



82383

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 12047662
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 Metri-Pack Series(BK)

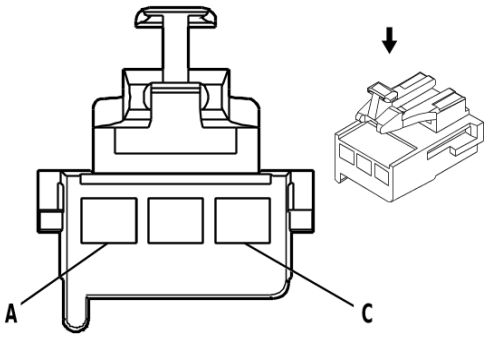
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S33 Horn Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	TN	28	Horn Relay Control	I	—
B	—	BK	350	Ground	I	—

S34 HVAC Controls Switch Assembly X1



68737

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12129489
Service Connector: 19368864
Description: 3-Way F 280 Metri-Pack Flexlock Series(BK)

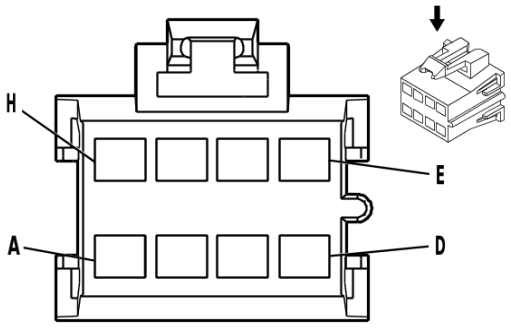
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S34 HVAC Controls Switch Assembly X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	WH	119	Mode Door Control	I	—
B	1	BK	550	Ground	I	—
C	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—

S34 HVAC Controls Switch Assembly X2



62469

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12064998
Service Connector: 15306189
Description: 8-Way F 280 Metri-Pack Series(BK)

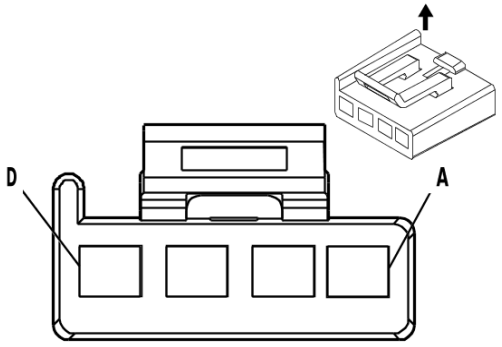
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S34 HVAC Controls Switch Assembly X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	YE	60	Blower Motor Low Speed Control	I	—
B	0.8	TN	63	Blower Motor Medium 1 Control	I	—
C	0.8	L-BU	72	Blower Motor Medium 2 Control	I	—
D	0.8	OG	52	Blower Motor High Speed Control	I	—
E	1	BN	141	Run Ignition 3 Voltage	I	—
F	0.8	L-BU	733	Air Temperature Door Position Signal	I	—
G	1	WH	119	Mode Door Control	I	—
H	0.5	D-GN / WH	762	A/C Request Signal 2	I	—

S34 HVAC Controls Switch Assembly X3



62450

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12052856
Service Connector: 12125636
Description: 4-Way F 280 Metri-Pack Series(BK)

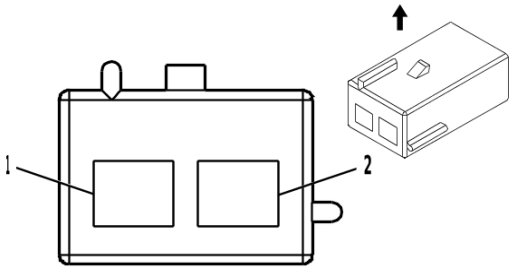
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S34 HVAC Controls Switch Assembly X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	RD / WH	4440	Battery Positive Voltage	I	—
B	0.35	BN	341	Run Ignition 3 Voltage	I	—
C	1	BK	550	Ground	I	—
D	0.35	WH	193	Rear Defogger Relay Control	I	—

S34 HVAC Controls Switch Assembly X4



1283895

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15318080
Service Connector: 21019410
Description: 2-Way F 280 Metri-Pack Series(BK)

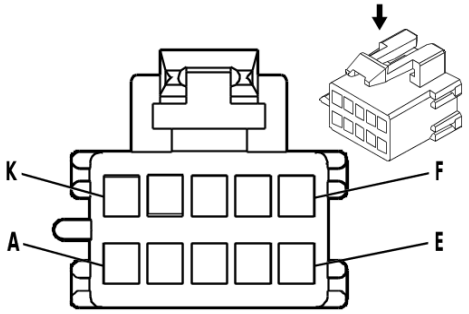
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S34 HVAC Controls Switch Assembly X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN	66	A/C Request Signal	I	—
2	0.5	D-GN / WH	762	A/C Request Signal 2	I	—

S34F HVAC Controls Switch Assembly - Auxiliary Front (With Rear HVAC Controls)



62464

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 12064769
Service Connector: 12101762
Description: 10-Way F 150 Metri-Pack Series(NA)

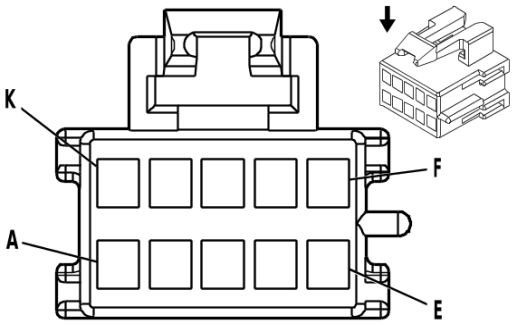
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575464	J-35616-14 (GN)	J-38125-12A

S34F HVAC Controls Switch Assembly - Auxiliary Front (With Rear HVAC Controls)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
B	0.35	BK	1850	Ground	I	—
C	0.5	D-BU	1926	Auxiliary Blower Motor Low Speed Control 2	I	—
D	0.5	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
E	0.5	OG	1925	Auxiliary Blower Motor Medium Speed Control 2	I	—
F	0.35	YE	5262	Auxiliary HVAC Rear Controls Enable Signal	I	—
G	0.35	BN	341	Run Ignition 3 Voltage	I	—
H	0.35	PU	5260	Auxiliary HVAC Front Temperature Signal	I	—
J	0.35	TN	5261	Auxiliary HVAC Front Mode Signal	I	—
K	—	—	—	Not Occupied	—	—

S34F HVAC Controls Switch Assembly - Auxiliary Front (Without Rear HVAC Controls)



803688

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 12064871
Service Connector: 12101832
Description: 10-Way F 150 Metri-Pack Series(BU)

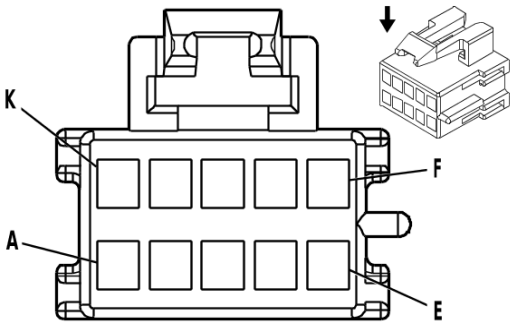
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575464	J-35616-14 (GN)	J-38125-12A

S34F HVAC Controls Switch Assembly - Auxiliary Front (Without Rear HVAC Controls)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
B	0.35	BK	1850	Ground	I	—
C	0.5	D-BU	1926	Auxiliary Blower Motor Low Speed Control 2	I	—
D	0.5	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
E	0.5	OG	1925	Auxiliary Blower Motor Medium Speed Control 2	I	—
F	0.35	BK	1850	Ground	I	—
G	0.35	BN	341	Run Ignition 3 Voltage	I	—
H	0.35	OG	2775	Rear Air Temperature Door Actuator Control	I	—
J	0.35	GY	2599	Rear Mode Door Actuator Signal	I	—
K	—	—	—	Not Occupied	—	—

S34R HVAC Controls Switch Assembly - Auxiliary Rear



803688

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 12064871
Service Connector: 12101832
Description: 10-Way F 150 Metri-Pack Series(BU)

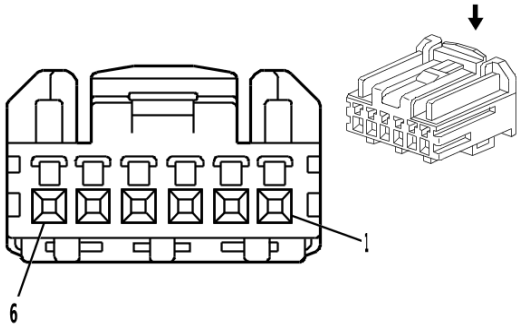
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575464	J-35616-14 (GN)	J-38125-12A

S34R HVAC Controls Switch Assembly - Auxiliary Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
B	0.5	BK	1050	Ground	I	—
C	0.5	D-BU	1926	Auxiliary Blower Motor Low Speed Control 2	I	—
D	0.5	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
E	0.5	OG	1925	Auxiliary Blower Motor Medium Speed Control 2	I	—
F	0.5	PK / BK	5265	Auxiliary HVAC Rear Control Signal	I	—
G	0.35	BN	341	Run Ignition 3 Voltage	I	—
H	0.5	BN	5263	Auxiliary HVAC Rear Temperature Signal	I	—
J	0.5	PU / WH	5264	Auxiliary HVAC Rear Mode Signal	I	—
K	—	—	—	Not Occupied	—	—

S39 Ignition Switch



3681331

Connector Part Information

Harness Type: Steering Column
OEM Connector: HCMPB-C06-K
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series(BK)

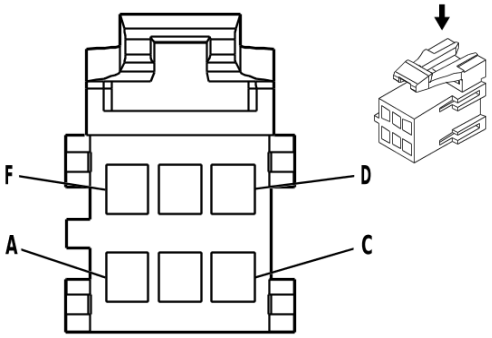
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S39 Ignition Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	—	PK	3	Run/Crank Ignition 1 Voltage	I	—
3	—	BN	4	Accessory Ignition Voltage	I	—
4	—	RD / WH	540	Battery Positive Voltage	I	—
5	—	PK	1020	Off/Run/Crank Ignition Voltage	I	—
6	—	WH	530	Off/Run/Crank Ignition Voltage	I	—

S40 Passenger Air Bag Disable Switch



362753

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15305286
Service Connector: 15306014
Description: 6-Way F 150 Metri-Pack Series(YE)

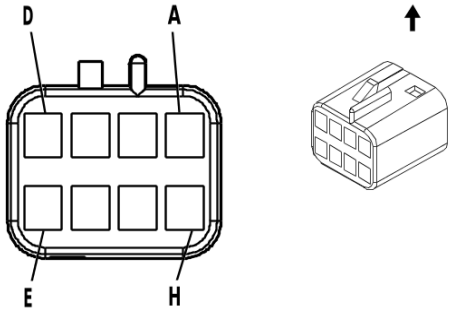
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

S40 Passenger Air Bag Disable Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	TN / BK	371	Passenger Supplemental Inflatable Restraint Disable Switch Signal	I	—
B	0.35	PK	1139	Run/Crank Ignition 1 Voltage	I	—
C	0.35	D-BU	2307	Passenger Air Bag On Indicator Control	I	—
D	0.5	PK	353	Passenger Supplemental Inflatable Restraint Suppression Indicator Control	I	—
E	0.5	BK / WH	1751	Signal Ground	I	—
F	0.35	D-GN	2308	Passenger Air Bag Off Indicator Control	I	—

S51 Telematics Button Assembly



62439

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series(BK)

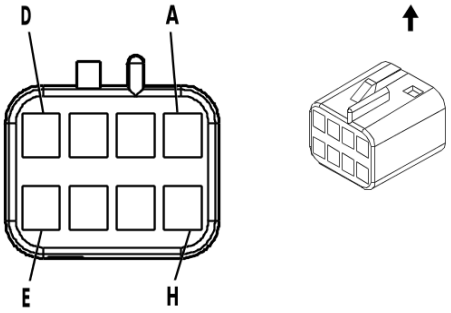
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

S51 Telematics Button Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	L-GN / BK	2515	Telematics Switch Supply Voltage	I	—
B	0.8	D-GN / WH	2514	Telematics Switch Signal	I	—
C - D	—	—	—	Not Occupied	—	—
E	1	BK / WH	351	Signal Ground	I	—
F	0.8	YE / BK	2516	Telematics Switch Green LED Indicator Control	I	—
G	0.8	BN / WH	2517	Telematics Switch Red LED Indicator Control	I	—
H	—	—	—	Not Occupied	—	—

S52 Outside Rearview Mirror Switch



62439

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series(BK)

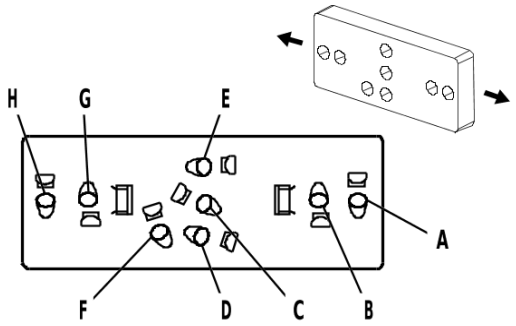
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

S52 Outside Rearview Mirror Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	OG / WH	881	Right Outside Rearview Mirror Motor Right Control	I	—
B	0.35	PU / WH	889	Right Outside Rearview Mirror Motor Down Control	I	—
C	0.35	BN / WH	1498	Right Outside Rearview Mirror Motor Up Control	I	—
D	0.5	BK	450	Ground	I	—
E	0.5	RD / WH	4340	Battery Positive Voltage	I	—
F	0.35	L-GN	89	Left Outside Rearview Mirror Motor Down Control	I	—
G	0.35	WH	81	Left Outside Rearview Mirror Motor Right Control	I	—
H	0.35	YE	88	Left Outside Rearview Mirror Motor Up Control	I	—

S64D Seat Adjuster Switch - Driver (AG1)



387555

Connector Part Information

Harness Type: Driver Seat
OEM Connector: 12066386
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F Pin Grip Connector(GY)

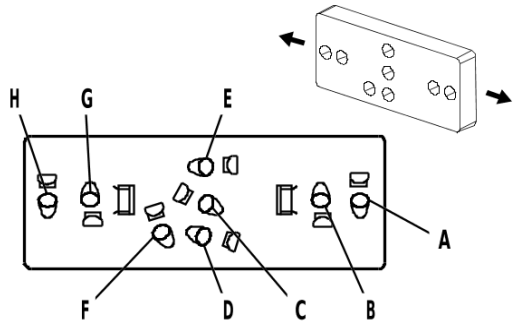
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S64D Seat Adjuster Switch - Driver (AG1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-BU	283	Driver Seat Rear Vertical Motor Down Control	I	—
B	—	YE	282	Driver Seat Rear Vertical Motor Up Control	I	—
C	—	BK	450	Ground	I	—
D	—	TN	285	Driver Seat Horizontal Motor Forward Control	I	—
E	—	L-GN	284	Driver Seat Horizontal Motor Rearward Control	I	—
F	—	RD / WH	3540	Battery Positive Voltage	I	—
G	—	D-BU	287	Driver Seat Front Vertical Motor Down Control	I	—
H	—	D-GN	286	Driver Seat Front Vertical Motor Up Control	I	—

S64P Seat Adjuster Switch - Passenger (AG2)



387555

Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 12066386
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F Pin Grip Connector(GY)

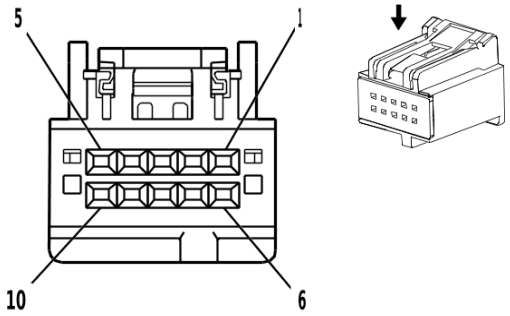
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S64P Seat Adjuster Switch - Passenger (AG2)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-BU	289	Passenger Seat Rear Vertical Motor Down Control	I	—
B	—	YE	288	Passenger Seat Rear Vertical Motor Up Control	I	—
C	—	BK	1850	Ground	I	—
D	—	TN	296	Passenger Seat Horizontal Motor Forward Control	I	—
E	—	L-GN	290	Passenger Seat Horizontal Motor Rearward Control	I	—
F	—	RD / WH	3540	Battery Positive Voltage	I	—
G	—	D-BU	298	Passenger Seat Front Vertical Motor Down Control	I	—
H	—	D-GN	297	Passenger Seat Front Vertical Motor Up Control	I	—

S70L Steering Wheel Controls Switch - Left (K34)



1399235

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 30700-1100
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 H-DAC Series(GY)

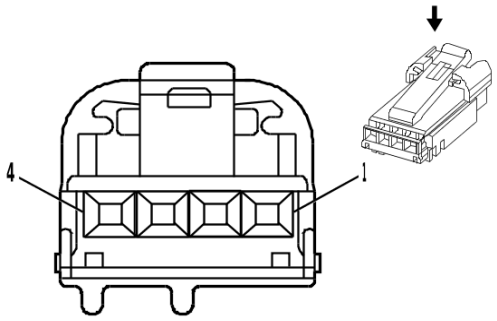
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S70L Steering Wheel Controls Switch - Left (K34)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	PK	1444	12V Reference	I	—
2	—	—	—	Not Occupied	—	—
3	—	GY	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
4 - 5	—	—	—	Not Occupied	—	—
6	—	BN	6136	Control	I	—
7	—	—	—	Not Occupied	—	—
8	—	BK	350	Ground	I	—
9	—	D-GN / WH	7158	Cruise Control Indicator Dimming Signal	I	—
10	—	—	—	Not Occupied	—	—

S70R Steering Wheel Controls Switch - Right (W1Y)



1709750

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 31068-1010
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 H-DAC Series(BK)

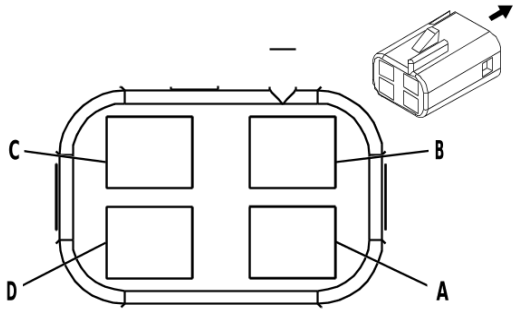
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S70R Steering Wheel Controls Switch - Right (W1Y)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	BK	350	Ground	I	—
2	—	BN	6136	Control	I	—
3	—	PK	1444	12V Reference	I	—
4	—	L-GN	6818	Steering Wheel Controls Signal 1	I	—

S74 Tow/Haul Mode Switch



39660

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12047785
Service Connector: 12102900
Description: 4-Way F 150 Metri-Pack Series(BK)

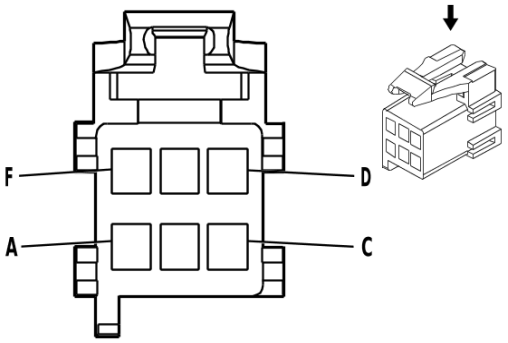
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

S74 Tow/Haul Mode Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK / WH	351	Signal Ground	I	—
B	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
C	—	—	—	Not Occupied	—	—
D	0.35	L-BU	1788	Traction Control Switch Signal 1	I	—

S75 Traction Control Switch



304345

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12177195
Service Connector: 15305931
Description: 6-Way F 150 Metri-Pack Series(BK)

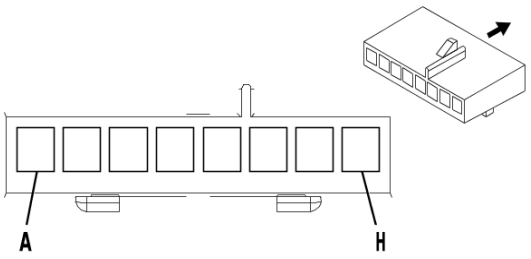
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

S75 Traction Control Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A - B	—	—	—	Not Occupied	—	—
C	0.35	BK / WH	351	Signal Ground	I	—
D	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
E	—	—	—	Not Occupied	—	—
F	0.5	D-BU	6727	Vehicle Stability Control Switch Signal	I	—

S78 Turn Signal/Multifunction Switch X1



39746

Connector Part Information

Harness Type: Steering Column
OEM Connector: 12064862
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series(BK)

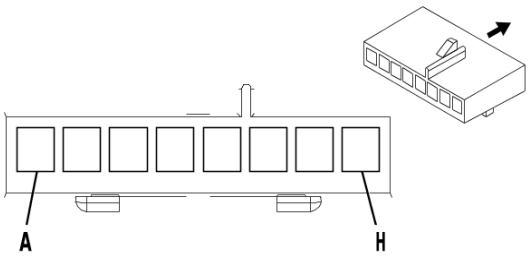
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S78 Turn Signal/Multifunction Switch X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A - B	—	—	—	Not Occupied	—	—
C	—	BK / WH	351	Signal Ground	I	—
D	—	TN	664	Hazard Switch Right Turn Signal	I	—
E	—	D-GN	663	Hazard Switch Left Turn Signal	I	—
F	—	BK / WH	351	Signal Ground	I	—
G	—	WH	111	Hazard Warning Switch Signal	I	—
H	—	—	—	Not Occupied	—	—

S78 Turn Signal/Multifunction Switch X2



39746

Connector Part Information

Harness Type: Steering Column
OEM Connector: 12064862
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series(BK)

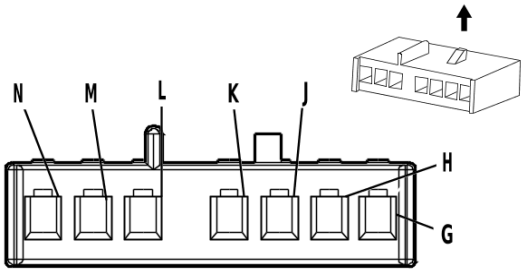
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S78 Turn Signal/Multifunction Switch X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A - B	—	—	—	Not Occupied	—	—
C	—	YE	525	High Beam Select Switch Low Beam Signal	I	—
D	—	BK / WH	351	Signal Ground	I	—
E	—	YE	307	Headlamp Switch Flash Signal	I	—
F - H	—	—	—	Not Occupied	—	—

S78 Turn Signal/Multifunction Switch X3



811190

Connector Part Information

Harness Type: Steering Column
OEM Connector: 15339058
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 150 Metri-Pack Series(GY)

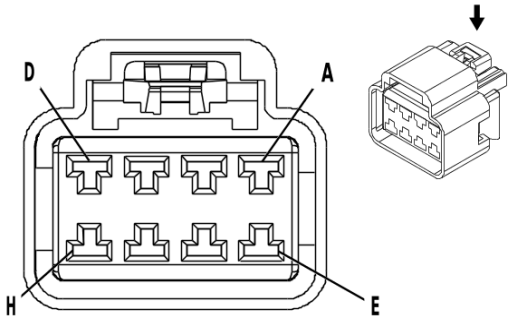
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

S78 Turn Signal/Multifunction Switch X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
G - J	—	—	—	Not Occupied	—	—
K	—	L-GN	1715	Windshield Wiper Switch High Signal	I	—
L	—	PK	94	Windshield Washer Switch Signal	I	—
M	—	TN / BK	6009	Windshield Wiper Switch Low Reference	I	—
N	—	L-BU	1714	Windshield Wiper Switch Low Signal	I	—

S79D Window Switch - Driver



556473

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15459914
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 GT Series, Sealed(BK)

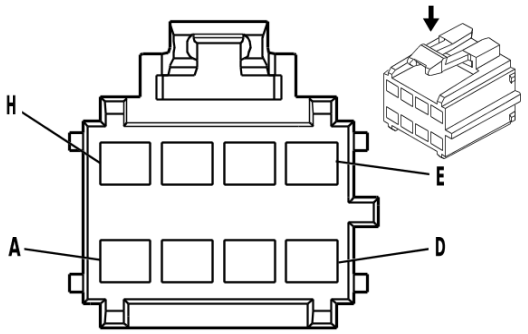
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S79D Window Switch - Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	L-BU	166	Right Front Window Up Switch Main Control Signal	I	—
B	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
C	3	D-GN	1001	Retained Accessory Power Ignition Voltage	I	—
D	3	TN	167	Right Front Window Down Switch Main Control Signal	I	—
E	—	—	—	Not Occupied	—	—
F	3	BK	450	Ground	I	—
G	3	D-BU	164	Left Front Window Motor Up Control	I	—
H	3	BN	165	Left Front Window Motor Down Control	I	—

S79P Window Switch - Passenger



333036

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 12191825
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 280 Metri-Pack Series(BN)

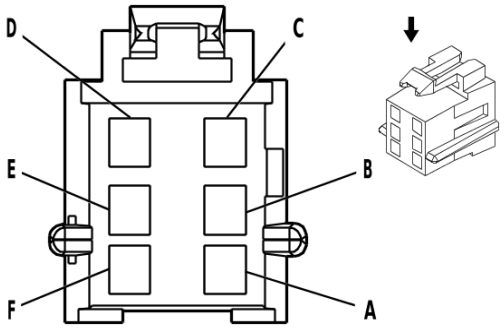
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S79P Window Switch - Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	D-GN	1001	Retained Accessory Power Ignition Voltage	I	—
B	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
C	0.35	BK	1850	Ground	I	—
D	3	TN	167	Right Front Window Down Switch Main Control Signal	I	—
E	—	—	—	Not Occupied	—	—
F	3	BN	667	Right Front Window Motor Down Control	I	—
G	3	D-BU	666	Right Front Window Motor Up Control	I	—
H	3	L-BU	166	Right Front Window Up Switch Main Control Signal	I	—

S85 Auxiliary Blower Motor Switch (C36)



62456

Connector Part Information

Harness Type: Auxiliary Heater Front Wiring Harness
OEM Connector: 12064752
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Series(BK)

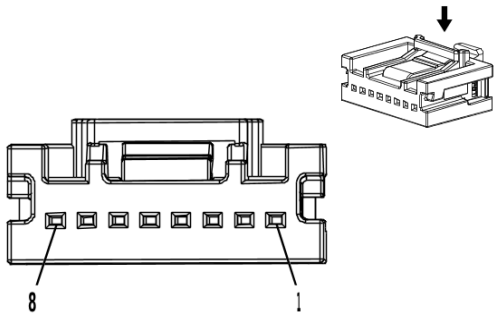
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

S85 Auxiliary Blower Motor Switch (C36)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BN / WH	230	Instrument Panel Lamp Dimming Control	I	—
B	0.35	BK	450	Ground	I	—
C	—	—	—	Not Occupied	—	—
D	0.35	WH	1924	Auxiliary Blower Motor High Speed Control	I	—
E	0.35	D-BU	1926	Auxiliary Blower Motor Low Speed Control 2	I	—
F	0.35	OG	1925	Auxiliary Blower Motor Medium Speed Control 2	I	—

S155 Lane Departure Warning Switch



4017639

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 33227522
Service Connector: 19354223
Description: 8-Way F Mini 50 Series(BK)

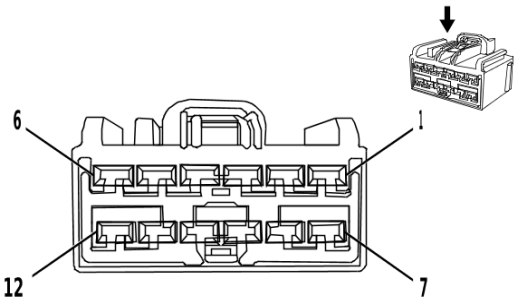
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	EL-35616-58 (BK)	No Tool Required

S155 Lane Departure Warning Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE / GY	1382	LED Dimming Signal	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.35	GY / WH	3153	Lane Departure Warning Disable Switch Signal	I	—
5	0.35	WH	6816	Indicator Dimming Control	I	—
6	—	—	—	Not Occupied	—	—
7	0.35	WH	3152	Lane Departure Warning Indicator Control	I	—
8	0.35	BK / WH	2151	Signal Ground	I	—

T1 Accessory DC/AC Power Inverter Module



2231648

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 10846814
Service Connector: 13518424
Description: 12-Way F 2.8 Kaizen Series(L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368264	J-35616-4A (PU)	J-38125-11A

T1 Accessory DC/AC Power Inverter Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	1	BK	5683	120V AC Phase A	I	—
3 - 5	—	—	—	Not Occupied	—	—
6	3	RD / WH	4140	Battery Positive Voltage	I	—
7	1	WH	5685	120V AC Neutral	I	—
8 - 9	—	—	—	Not Occupied	—	—
10	0.5	BK / WH	1351	Signal Ground	I	—
11	3	BK	550	Ground	I	—
12	0.35	D-GN	2266	DC/AC Inverter Control 2	I	—

T4M Radio Antenna

—

Connector Part Information

Harness Type: Antenna
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

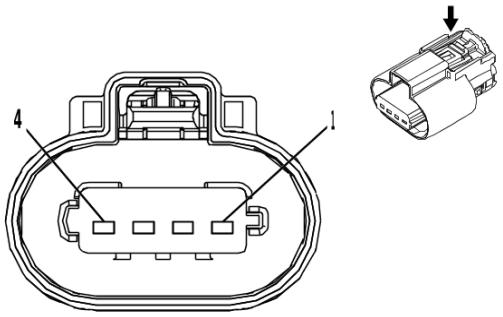
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

T4M Radio Antenna

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
BK	—	—	Coax Cable	Coax Cable	I	—

T8A Ignition Coil 1



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

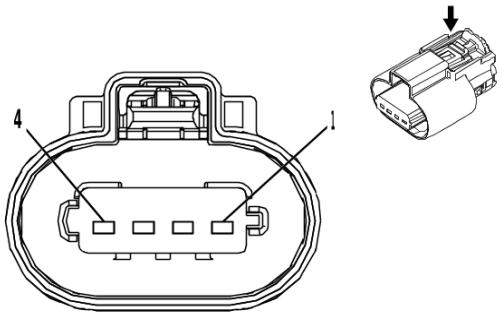
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

T8A Ignition Coil 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK / D-BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	D-BU / VT	2121	Ignition Control 1	I	—
4	0.75 0.75	VT / D-BU VT / GY	5291 1039	Powertrain Main Relay Fused Supply Voltage 2 Run/Crank Ignition 1 Voltage	I I	L8T LV1

T8B Ignition Coil 2



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

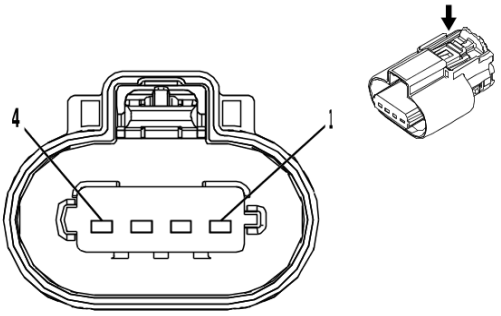
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

T8B Ignition Coil 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	D-BU / WH	2122	Ignition Control 2	I	—
4	0.75 0.75	VT / D-BU VT / BK	5292 1239	Powertrain Main Relay Fused Supply Voltage 3 Run/Crank Ignition 1 Voltage	I I	L8T LV1

T8C Ignition Coil 3



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

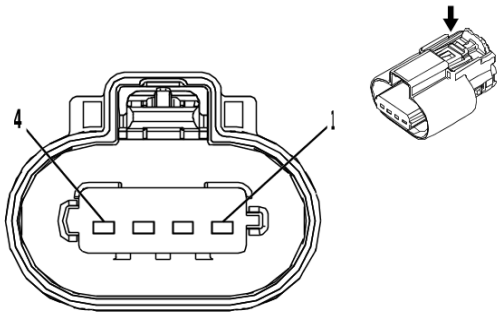
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

T8C Ignition Coil 3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK / D-BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	L-GN / D-BU	2123	Ignition Control 3	I	—
4	0.75 0.75	VT / D-BU VT / GY	5291 1039	Powertrain Main Relay Fused Supply Voltage 2 Run/Crank Ignition 1 Voltage	I I	L8T LV1

T8D Ignition Coil 4



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

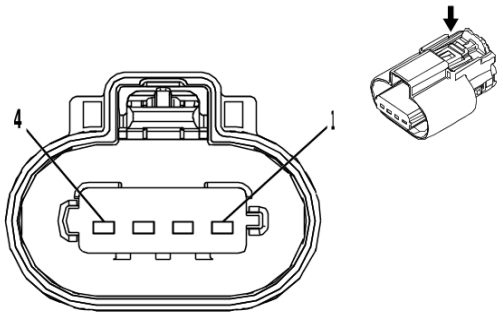
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

T8D Ignition Coil 4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	YE / D-BU	2124	Ignition Control 4	I	—
4	0.75 0.75	VT / D-BU VT / BK	5292 1239	Powertrain Main Relay Fused Supply Voltage 3 Run/Crank Ignition 1 Voltage	I I	L8T LV1

T8E Ignition Coil 5



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

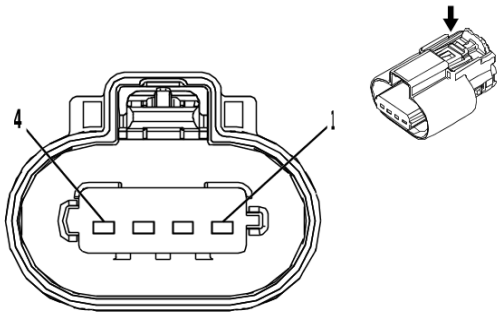
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

T8E Ignition Coil 5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK / D-BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	D-BU / GY	2125	Ignition Control 5	I	—
4	0.75 0.75	VT / D-BU VT / GY	5291 1039	Powertrain Main Relay Fused Supply Voltage 2 Run/Crank Ignition 1 Voltage	I I	L8T LV1

T8F Ignition Coil 6



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

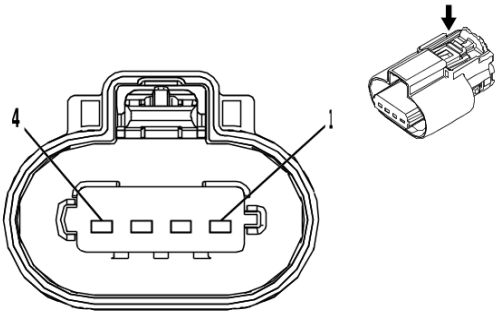
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

T8F Ignition Coil 6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	BN / D-BU	2126	Ignition Control 6	I	—
4	0.75 0.75	VT / D-BU VT / BK	5292 1239	Powertrain Main Relay Fused Supply Voltage 3 Run/Crank Ignition 1 Voltage	I I	L8T LV1

T8G Ignition Coil 7



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

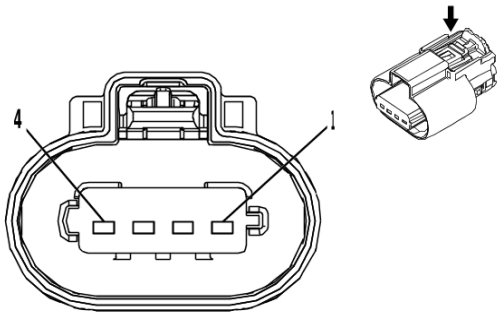
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

T8G Ignition Coil 7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK / D-BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	L-GN / GY	2127	Ignition Control 7	I	—
4	0.75	VT / D-BU	5291	Powertrain Main Relay Fused Supply Voltage 2	I	—

T8H Ignition Coil 8



3240115

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863211
Service Connector: 19367596
Description: 4-Way F 1.5 MX Series, Sealed(BK)

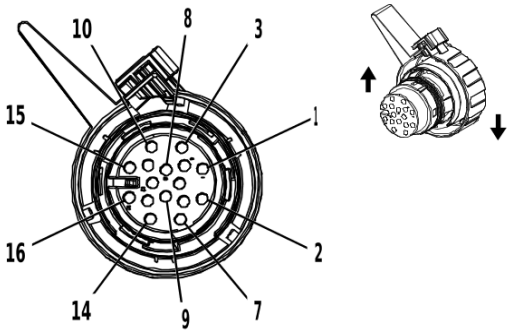
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required

T8H Ignition Coil 8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	350	Ground	I	—
2	0.5	BK / GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	VT / WH	2128	Ignition Control 8	I	—
4	0.75	VT / D-BU	5292	Powertrain Main Relay Fused Supply Voltage 3	I	—

T12 Automatic Transmission Assembly



3277917

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13878751
Service Connector: 19303772
Description: 16-Way F 1.5 LKS Series, Sealed(BK)

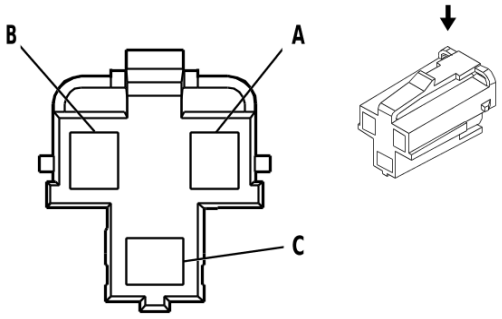
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575237	J-35616-66 (YE)	J-38125-28

T12 Automatic Transmission Assembly

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	—	—	—	Not Occupied	—	—
3	0.5	WH / GY	1786	Transmission Park/Neutral Signal 1	I	—
4	0.5	RD / L-GN	1840	Battery Positive Voltage	I	—
5	0.75	BK / WH	1551	Signal Ground	I	—
6	0.5	WH / D-BU	6311	Cruise/ETC/TCC Brake Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
9	0.5	VT / YE	5985	Accessory Wake-Up Serial Data	I	—
10	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
11	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
12	0.5	VT / BK	2139	Run/Crank Ignition 1 Voltage	I	—
13	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
14	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
15	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
16	0.5	BN / VT	6399	Replicated Transmission Output Speed Signal	I	—

X80A Accessory Power Receptacle - Center Console 1



362748

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12176836
Service Connector: 19369634
Description: 3-Way F 280 Metri-Pack Series(GY)

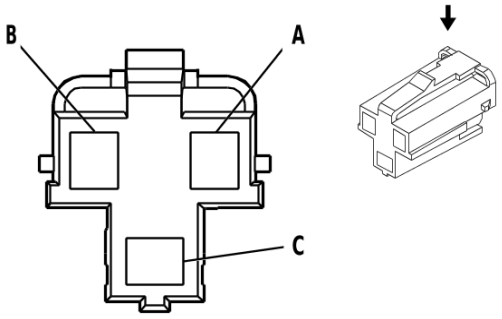
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

X80A Accessory Power Receptacle - Center Console 1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	RD / WH	640	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1	BK	550	Ground	I	—

X80B Accessory Power Receptacle - Center Console 2



362748

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12176836
Service Connector: 19369634
Description: 3-Way F 280 Metri-Pack Series(GY)

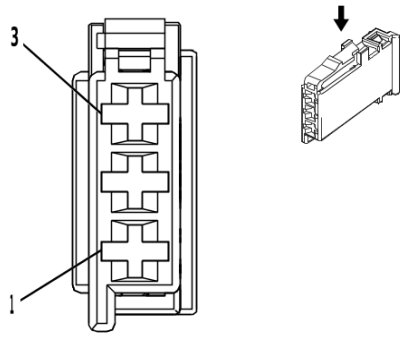
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

X80B Accessory Power Receptacle - Center Console 2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	RD / WH	1040	Battery Positive Voltage	I	—
B	—	—	—	Not Occupied	—	—
C	1	BK	550	Ground	I	—

X81 Accessory Power Receptacle - 110V AC X1



2039656

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 10865339
Service Connector: 86790560
Description: 3-Way F 1.6 Micro-Timer Series(BK)

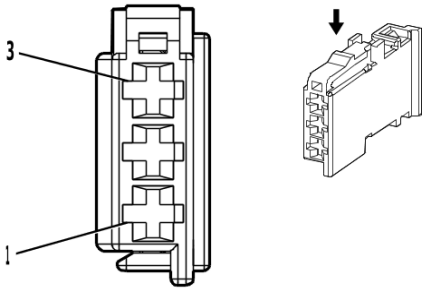
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

X81 Accessory Power Receptacle - 110V AC X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	6807	DC/AC Inverter Control	I	—
2	—	—	—	Not Occupied	—	—
3	1	BK	5683	120V AC Phase A	I	—

X81 Accessory Power Receptacle - 110V AC X2



2236412

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13648774
Service Connector: 19367740
Description: 3-Way F 1.6 Timer Series, Sealed(GY)

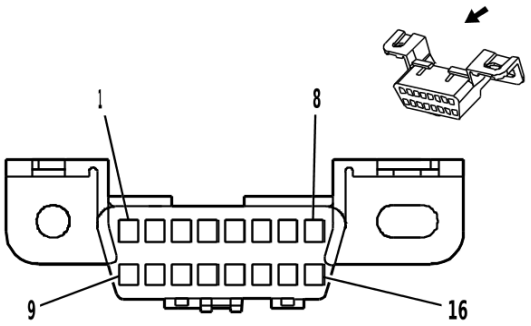
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required

X81 Accessory Power Receptacle - 110V AC X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	D-GN	2266	DC/AC Inverter Control 2	I	—
2	—	—	—	Not Occupied	—	—
3	1	WH	5685	120V AC Neutral	I	—

X84 Data Link Connector



68793

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12110250
Service Connector: 12110250
Description: 16-Way F 150 Metri-Pack Series(BK)

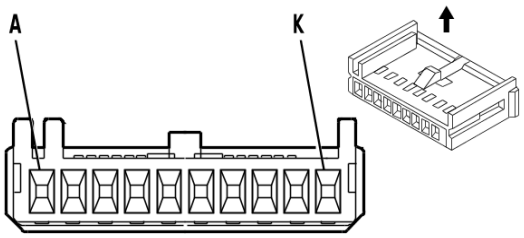
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13580059	J-35616-14 (GN)	J-38125-12A

X84 Data Link Connector

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	D-GN	5060	Low Speed GMLAN Serial Data	I	—
2 - 3	—	—	—	Not Occupied	—	—
4	0.5	BK / WH	351	Signal Ground	I	—
5	0.5	BK / WH	351	Signal Ground	I	—
6	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
7 - 13	—	—	—	Not Occupied	—	—
14	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
15	—	—	—	Not Occupied	—	—
16	0.8	RD / WH	640	Battery Positive Voltage	I	—

X85 Steering Wheel Air Bag Coil X1



1593397

Connector Part Information

Harness Type: Steering Column
OEM Connector: 15393433
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Micro-Pack Series(BK)

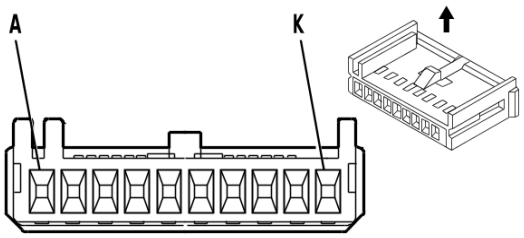
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X85 Steering Wheel Air Bag Coil X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	BK	350	Ground	I	—
B	—	TN	28	Horn Relay Control	I	—
C	—	D-GN / WH	7158	Cruise Control Indicator Dimming Signal	I	—
D - E	—	—	—	Not Occupied	—	—
F	—	PK	1444	12V Reference	I	—
G	—	BN	6136	Control	I	—
H	—	L-GN	6818	Steering Wheel Controls Signal 1	I	—
J	—	—	—	Not Occupied	—	—
K	—	GY	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—

X85 Steering Wheel Air Bag Coil X2



1593397

Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 15393433
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Micro-Pack Series(BK)

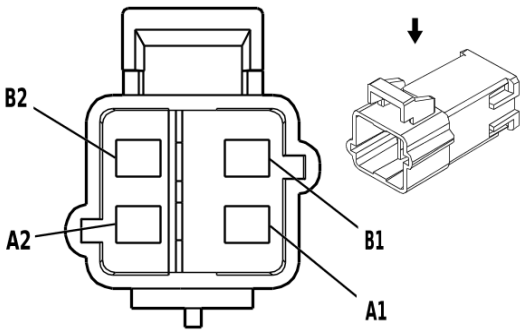
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X85 Steering Wheel Air Bag Coil X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	GY	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
B	—	—	—	Not Occupied	—	—
C	—	L-GN	6818	Steering Wheel Controls Signal 1	I	—
D	—	BN	6136	Control	I	—
E	—	PK	1444	12V Reference	I	—
F - G	—	—	—	Not Occupied	—	—
H	—	D-GN / WH	7158	Cruise Control Indicator Dimming Signal	I	—
J	—	TN	28	Horn Relay Control	I	—
K	—	BK	350	Ground	I	—

X85 Steering Wheel Air Bag Coil X3



684931

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15336476
Service Connector: 88987998
Description: 4-Way M 280 Metri-Pack Series(YE)

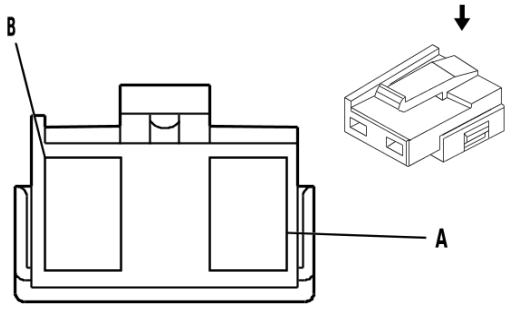
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-5 (PU)	No Tool Required

X85 Steering Wheel Air Bag Coil X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A1	0.5	TN	3021	Steering Wheel Air Bag Stage 1 High Control	I	—
A2	0.5	BN	3020	Steering Wheel Air Bag Stage 1 Low Control	I	—
B1 - B2	—	—	—	Not Occupied	—	—

X87RB Sliding Door Jamb Contact Plate - Right Body (Body)



38274

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12034343
Service Connector: 12101821
Description: 2-Way F 280 Metri-Pack Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required

X87RB Sliding Door Jamb Contact Plate - Right Body (Body)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	1	GY	295	Door Lock Actuator Lock Control	I	—

X87RB Sliding Door Jamb Contact Plate - Right Body (Door)

—

Connector Part Information

Harness Type: Rear Side Door Wiring Harness
OEM Connector: 33148350
Service Connector: Service by Harness - See Part Catalog
Description: Striker Plate

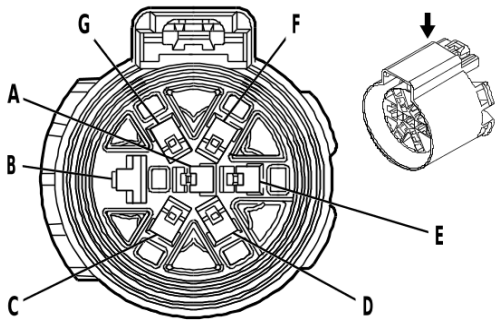
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required

X87RB Sliding Door Jamb Contact Plate - Right Body (Door)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	TN	294	Door Lock Actuator Unlock Control	I	—
B	0.8	GY	295	Door Lock Actuator Lock Control	I	—

X88 Trailer Connector (-NE7)



2056936

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 13857223
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed(BK)

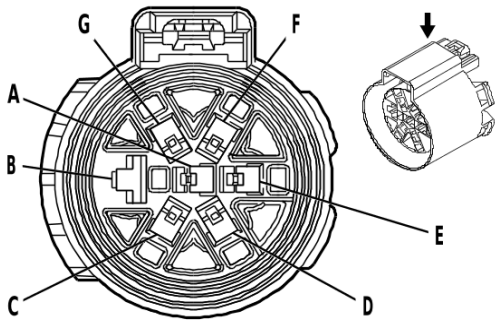
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-42 (RD)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required

X88 Trailer Connector (-NE7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	L-GN	1624	Trailer Backup Lamp Control	II	—
B	8	WH	22	Trailer Ground	I	—
C	3	D-BU	47	Trailer Auxiliary Control	II	—
D	1	D-GN	1619	Right Rear Trailer Stop/Turn Lamp Control	II	—
E	3	RD / BK	742	Battery Positive Voltage	II	—
F	1	BN	2109	Trailer Park Lamp Control	II	—
G	1	YE	1618	Left Rear Trailer Stop/Turn Lamp Control	II	—

X88 Trailer Connector (NE7)



2056936

Connector Part Information

Harness Type: Trailer Jumper Wiring Harness
OEM Connector: 13583072
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed(BK)

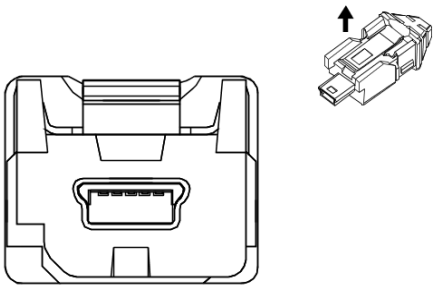
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X88 Trailer Connector (NE7)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	—	L-GN	1624	Trailer Backup Lamp Control	I	—
B	—	WH	22	Trailer Ground	I	—
C	—	D-BU	47	Trailer Auxiliary Control	I	—
D	—	D-GN	1619	Right Rear Trailer Stop/Turn Lamp Control	I	—
E	—	RD / BK	742	Battery Positive Voltage	I	—
F	—	BN	2109	Trailer Park Lamp Control	I	—
G	—	YE	1618	Left Rear Trailer Stop/Turn Lamp Control	I	—

X92 USB Receptacle



3270479

Connector Part Information

Harness Type: Instrument Panel Wiring Harness USB
OEM Connector: 13668063
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type(BK)

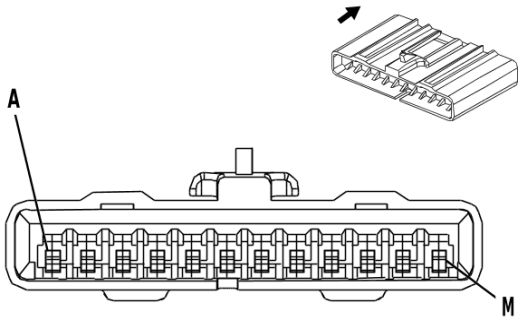
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X92 USB Receptacle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	—	USB	—	USB Serial Data	I	—

Splice Pack Connector End Views
JX200 Splice Pack



966355

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12176461
Service Connector: 15305914
Description: 12-Way F 150 GT Series(BK)

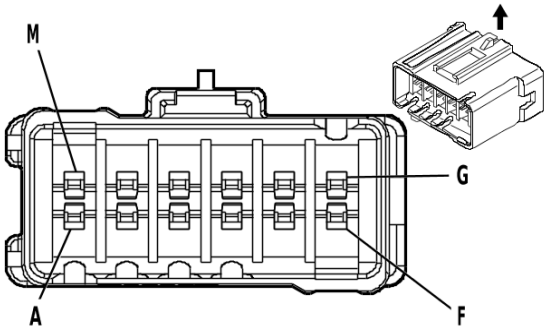
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13591480	J-35616-14 (GN)	J-38125-215A

JX200 Splice Pack

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
B	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
C	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
D	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
E	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
F	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
G	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
H	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
J	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
K	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
L	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—
M	0.5	GN	5060	Low Speed GMLAN Serial Data	I	—

JX250 Splice Pack



803605

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15305288
Service Connector: 12167610
Description: 12-Way F 280 Metri-Pack Series(BK)

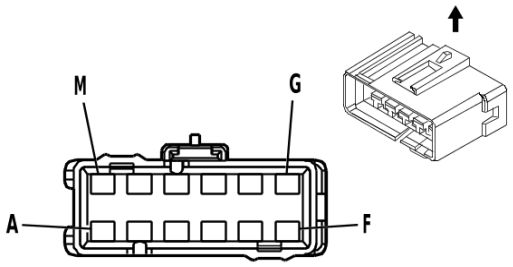
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575721	J-35616-4A (PU)	J-38125-553

JX250 Splice Pack

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
B	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
C	0.5	D-BU	2500	High Speed GMLAN Serial Data [+] 1	I	—
D - J	—	—	—	Not Occupied	—	—
K	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
L	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—
M	0.5	WH	2501	High Speed GMLAN Serial Data [-] 1	I	—

JX347 Splice Pack



365987

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12191928
Service Connector: 88986418
Description: 12-Way F 280 Metri-Pack Series(BK)

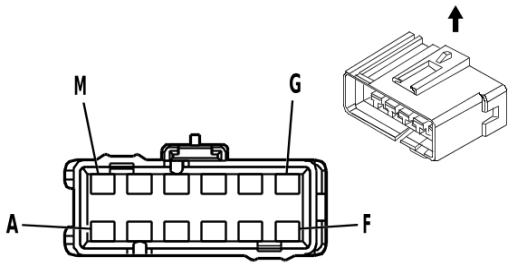
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579958	J-35616-4A (PU)	J-38125-11A

JX347 Splice Pack

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	3	BK	450	Ground	I	—
B	—	—	—	Not Occupied	—	—
C	0.35	BK	450	Ground	I	—
D	0.35	BK	450	Ground	I	—
E	5	BK	450	Ground	I	—
F	—	—	—	Not Occupied	—	—
G	5	BK	450	Ground	I	—
H - L	—	—	—	Not Occupied	—	—
M	3	BK	450	Ground	I	AG1

JX348 Splice Pack



365987

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12191928
Service Connector: 88986418
Description: 12-Way F 280 Metri-Pack Series(BK)

Terminal Part Information

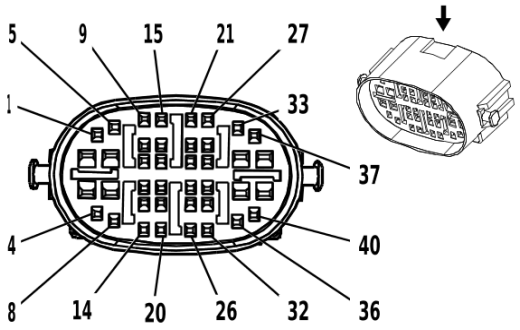
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579958	J-35616-4A (PU)	J-38125-11A

JX348 Splice Pack

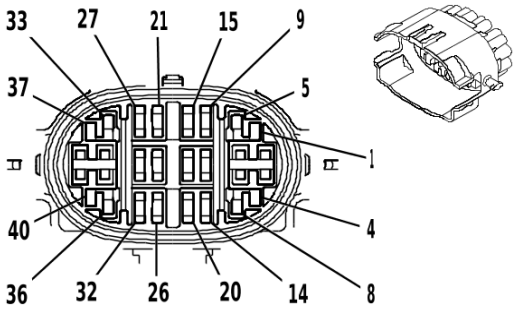
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	1850	Ground	I	—
B	0.8	BK	1850	Ground	I	—
C	3	BK	1850	Ground	I	—
D	0.35	BK	1850	Ground	I	—
E	—	—	—	Not Occupied	—	—
F	0.5	BK	1850	Ground	I	—
G	0.5	BK / WH	2751	Signal Ground	I	—
H	—	—	—	Not Occupied	—	—
J	1	BK	1850	Ground	I	—
K - M	—	—	—	Not Occupied	—	—

Inline Harness Connector End Views

X100 Instrument Panel Wiring Harness to Engine Wiring Harness



1713502



1713503

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13601803
Service Connector: 19166997
Description: 40-Way F 150, 280 GT Series, Sealed(BK)

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13605375
Service Connector: 19169297
Description: 40-Way M 150, 280 GT Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575403	J-35616-4A (PU)	J-38125-215A
II	13579779	J-35616-14 (GN)	J-38125-215A
III	Not Available	J-35616-14 (GN)	J-38125-215A
IV	13576358	J-35616-5 (PU)	J-38125-215A
V	13579781	J-35616-3 (GY)	J-38125-215A
VI	19368625	J-35616-3 (GY)	J-38125-215A

X100 Instrument Panel Wiring Harness to Engine Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	WH / D-BU	6311	II	—	Cruise/ETC/ TCC Brake Signal	1	0.5	WH / D-BU	6311	V	—
2	0.8	OG	52	I	—	Blower Motor High Speed Control	2	1	WH / BK	52	IV	—
3	0.8	L-BU	72	I	—	Blower Motor Medium 2 Control	3	2	D-BU / YE	72	IV	—
4	0.5	OG	1732	II	—	Control Module 12V Reference 3	4	0.5	VT / RD	1732	V	—
5	—	—	—	—	—	Not Occupied	5	—	—	—	—	—
6	0.8	TN	63	I	—	Blower Motor Medium 1 Control	6	1	YE / BN	63	IV	—
7	2	BK	1250	I	—	Ground	7	2	BK	1250	IV	—

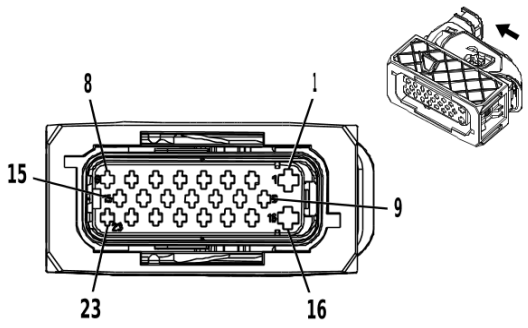
X100 Instrument Panel Wiring Harness to Engine Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.8	YE	60	II	—	Blower Motor Low Speed Control	8	1	YE	60	V	—
9 - 13	—	—	—	—	—	Not Occupied	9 - 13	—	—	—	—	—
14	0.5	L-GN	66	II	—	A/C Request Signal	14	0.5	BN	66	V	—
15	0.5	WH / D-BU	5986	II	—	Serial Data Communication Enable	15	0.5	WH / D-BU	5986	V	—
16	0.5	L-GN	66	II	—	A/C Request Signal	16	0.5	BN / WH	66	V	—
17	0.75	L-GN / GY	333	II	—	Brake Fluid Level Signal	17	0.75	L-GN / GY	333	V	—
18	0.5	BN / WH	419	II	—	Check Engine Indicator Control	18	0.5	BN / WH	419	V	—
19	0.5	D-BU	5985	II	—	Accessory Wake-Up Serial Data	19	0.5	VT / YE	5985	V	—
20	—	—	—	—	—	Not Occupied	20	—	—	—	—	—
21	0.35	BK / D-BU	1271	III	—	Accelerator Pedal Position Low Reference 1	21	0.5	BK / D-BU	1271	VI	—
22	0.35	WH / RD	1164	III	—	Accelerator Pedal Position 5V Reference 1	22	0.5	WH / RD	1164	VI	—
23	0.35	BN / RD	1274	III	—	Accelerator Pedal Position 5V Reference 2	23	0.5	BN / RD	1274	VI	—
24	0.5	BK / WH	451	II	—	Signal Ground	24	0.75	BK / WH	451	V	—
25	0.5	WH	5075	II	—	Current Sensor Signal	25	0.5	WH / YE	5075	V	—
26	0.5	BN	5077	II	—	Current Sensor Low Reference	26	0.5	BK / VT	5077	V	—
27	0.35	YE / WH	1161	III	—	Accelerator Pedal Position Signal 1	27	0.5	YE / WH	1161	VI	—
28	0.35	BK / VT	1272	III	—	Accelerator Pedal Position Low Reference 2	28	0.5	BK / VT	1272	VI	—
29	0.35	L-GN / WH	1162	III	—	Accelerator Pedal Position Signal 2	29	0.5	L-GN / WH	1162	VI	—
30	0.5	PK	5076	II	—	Current Sensor Voltage Reference	30	0.5	D-BU / VT	5076	V	—
31 - 32	—	—	—	—	—	Not Occupied	31 - 32	—	—	—	—	—

X100 Instrument Panel Wiring Harness to Engine Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
33	0.5	D-BU	2500	II	—	High Speed GMLAN Serial Data [+] 1	33	0.5	D-BU	2500	V	—
34	0.5	BK / L-GN	580	I	—	Engine Control Sensors Low Reference 2	34	0.5	BK / L-GN	580	IV	—
35	0.5	D-BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	35	0.5	D-BU / GY	636	IV	—
36	0.5	D-BU	2500	II	—	High Speed GMLAN Serial Data [+] 1	36	0.5	D-BU	2500	V	—
37	0.5	WH	2501	II	—	High Speed GMLAN Serial Data [-] 1	37	0.5	WH	2501	V	—
38 - 39	—	—	—	—	—	Not Occupied	38 - 39	—	—	—	—	—
40	0.5	WH	2501	II	—	High Speed GMLAN Serial Data [-] 1	40	0.5	WH	2501	V	—

X101 Engine Wiring Harness to Chassis Wiring Harness



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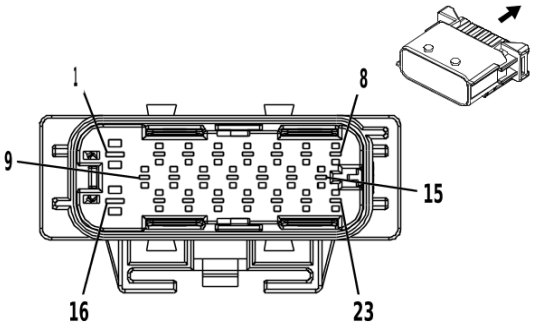


2906943

Connector Part Information

Harness Type: Engine Wiring Harness

OEM Connector: 13674800

Service Connector: 19300480

Description: 23-Way F 1.5 DSQ, 2.8 ATS Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness

OEM Connector: 13674783

Service Connector: Service by Harness - See Part Catalog

Description: 23-Way M 1.5 DSQ, 2.8 ATS Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368143	J-35616-14 (GN)	J-38125-215A
II	Not required	J-35616-3 (GY)	No Tool Required

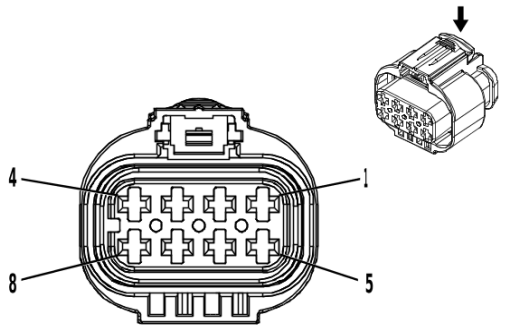
X101 Engine Wiring Harness to Chassis Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.5	D-BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	2	0.5	D-BU	2500	II	—
3	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	3	0.5	WH	2501	II	—
4	0.5	YE	2375	I	—	Left Rear Outer Parking Assist Sensor Signal	4	0.5	YE	2375	II	—
5	0.5	YE / D-BU	2376	I	—	Left Rear Middle Parking Assist Sensor Signal	5	0.5	YE / D-BU	2376	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.5	BK / GY	2379	I	—	Object Sensor Low Reference	7	0.5	BK / GY	2379	II	—
8	0.5	L-GN / GY	465	I	—	Fuel Pump Primary Relay Control	8	0.5	L-GN / GY	465	II	—

X101 Engine Wiring Harness to Chassis Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	0.5	YE / WH	2377	I	—	Right Rear Middle Parking Assist Sensor Signal	10	0.5	YE / WH	2377	II	—
11	—	—	—	—	—	Not Occupied	11	—	—	—	—	—
12	0.5	VT / L-GN	4320	I	—	Powertrain Sensor Bus Enable	12	0.5	VT / L-GN	4320	II	—
13	—	—	—	—	—	Not Occupied	13	—	—	—	—	—
14	0.5	BN / WH	2374	I	—	Object Sensor Voltage Reference	14	0.5	BN / WH	2374	II	—
15	0.5	YE / VT	2378	I	—	Right Rear Outer Parking Assist Sensor Signal	15	0.5	YE / VT	2378	II	—
16	—	—	—	—	—	Not Occupied	16	—	—	—	—	—
17	0.5	D-BU / BN	4498	I	—	High Speed GMLAN Serial Data [+] 7	17	0.5	D-BU / BN	4498	II	—
18	0.5	WH	4499	I	—	High Speed GMLAN Serial Data [-] 7	18	0.5	WH	4499	II	—
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	0.5	WH / D-BU	5986	I	—	Serial Data Communication Enable	20	0.5	WH / D-BU	5986	II	—
21	—	—	—	—	—	Not Occupied	21	—	—	—	—	—
22	0.5	D-BU	2500	I	—	High Speed GMLAN Serial Data [+] 1	22	0.5	D-BU	2500	II	—
23	0.5	WH	2501	I	—	High Speed GMLAN Serial Data [-] 1	23	0.5	WH	2501	II	—

X102 Chassis Wiring Harness to Fuel Tank Wiring Harness



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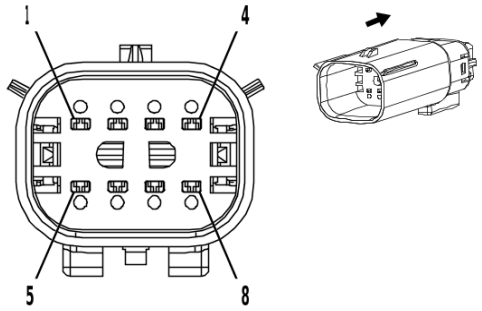


2667653

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33180742
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 2.8 Series, Sealed(L-GY)

Connector Part Information

Harness Type: Fuel Tank Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M (L-GY)

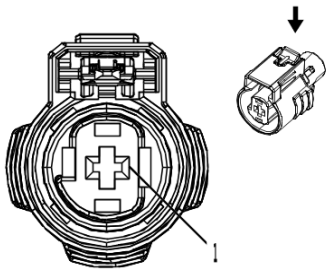
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	No Tool Required	No Tool Required

X102 Chassis Wiring Harness to Fuel Tank Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	GY	120	I	—	Fuel Pump Control	1	2.5	GY	120	II	—
2	2.5	YE / GY	4137	I	—	Fuel Pump Supply Voltage Phase 2	2	2.5	YE / GY	4137	II	—
3	2.5	WH / BN	4138	I	—	Fuel Pump Supply Voltage Phase 3	3	2.5	WH / BN	4138	II	—
4	0.5	BK	7444	I	—	Fuel Pump Assembly Shield Ground	4	0.5	BK	7444	II	—
5	0.5	D-BU / VT	1589	I	—	Primary Fuel Level Sensor Signal	5	0.5	D-BU / VT	1589	II	—
6	0.5	BK / L-GN	6281	I	—	Fuel Level Sensor Low Reference	6	0.5	BK / GN	6281	II	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—

X103 Engine Wiring Harness to Starter Motor Jumper Wiring Harness



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2717134

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15526411
Service Connector: 19300471
Description: 1-Way F 2.8 MCP Series, Sealed(BK)

Connector Part Information

Harness Type: Starter Motor Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way M (BK)

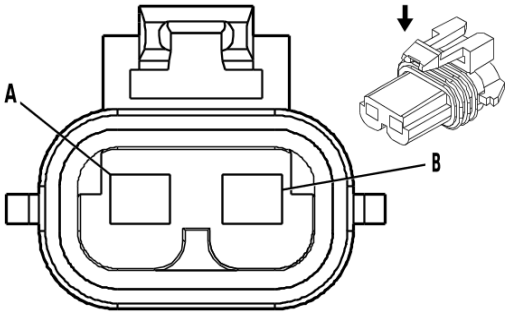
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	No Tool Required	No Tool Required

X103 Engine Wiring Harness to Starter Motor Jumper Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	4	YE	6	I	—	Starter Solenoid Crank Ignition Voltage	1	4	YE	6	II	—

X104 Instrument Panel Wiring Harness to Air Bag Jumper Wiring Harness



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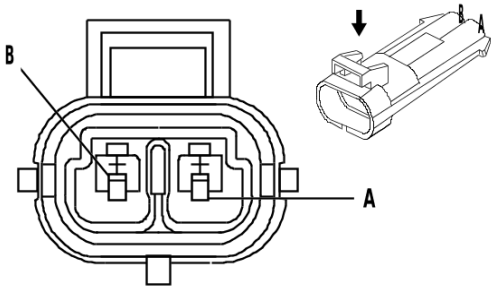


879383

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12077900
Service Connector: 12116247
Description: 2-Way F 280 Metri-Pack Series, Sealed(BK)

Connector Part Information

Harness Type: Air Bag Jumper Wiring Harness
OEM Connector: 15317807
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 280 Metri-Pack Series(BK)

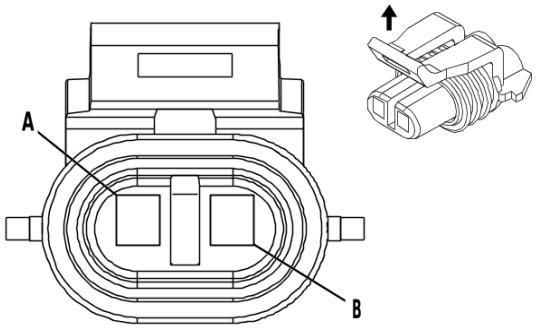
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X104 Instrument Panel Wiring Harness to Air Bag Jumper Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	D-BU / WH	6619	I	—	Front Middle Impact Discriminating Sensor Low Reference	A	0.5	D-BU / WH	6619	II	—
B	0.5	BN / WH	6618	I	—	Front Middle Impact Discriminating Sensor Signal	B	0.5	BN / WH	6618	II	—

X109 Engine Wiring Harness to Underhood Lamp Wiring Harness



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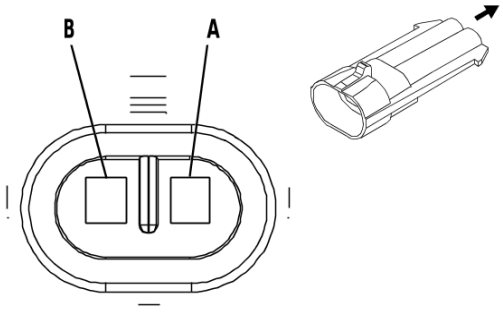


333041

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 12052641
Service Connector: 13586114
Description: 2-Way F 150 Metri-Pack Series, Sealed(BK)

Connector Part Information

Harness Type: Underhood Lamp Wiring Harness
OEM Connector: 12162000
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series, Sealed(BK)

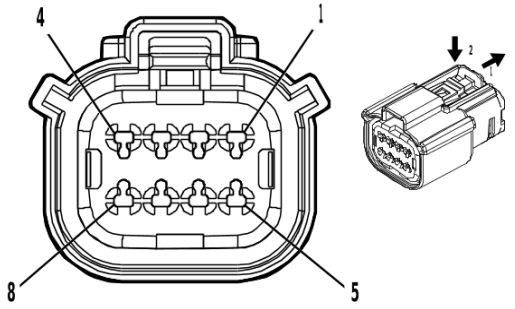
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X109 Engine Wiring Harness to Underhood Lamp Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	VT / RD	1732	I	—	Control Module 12V Reference 3	A	0.5	OG	1732	II	—
B	0.75	BK	1250	I	—	Ground	B	0.5	BK	1250	II	—

X130 Engine Wiring Harness to Camshaft Position Sensor Jumper Wiring Harness



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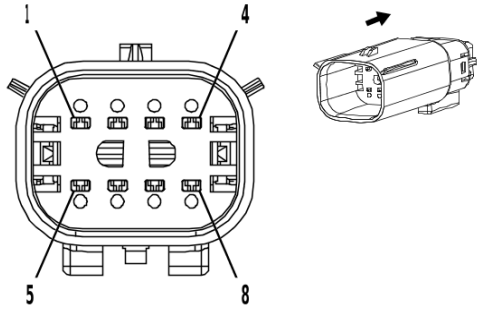

2667653

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35063116
Service Connector: 84928314
Description: 8-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Camshaft Position Sensor Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

X130 Engine Wiring Harness to Camshaft Position Sensor Jumper Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY / D-BU	5300	I	—	Intake Camshaft Position Sensor 1 Voltage Reference	1	0.5	GY / D-BU	5300	II	—
2	0.5	BK / L-GN	5301	I	—	Intake Camshaft Position Sensor Low Reference 1	2	0.5	BK / L-GN	5301	II	—
3	0.5	YE / VT	5275	I	—	Intake Camshaft Position Sensor 1	3	0.5	YE / VT	5275	II	—
4	0.5	D-BU	179	I	—	Engine Oil Pump Control	4	0.5	D-BU	179	II	—
5	0.5	VT / BN	5284	I	—	Intake Camshaft Position Actuator Solenoid Valve 1	5	0.5	VT / BN	5284	II	—
6	0.5	BK / BN	6753	I	—	Camshaft Position Actuator Solenoid Valve W Low Reference	6	0.5	BK / BN	6753	II	—

X130 Engine Wiring Harness to Camshaft Position Sensor Jumper Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	VT / D-BU	5293	I	—	Powertrain Main Relay Fused Supply Voltage 4	7	0.5	VT / D-BU	5293	II	—
8	—	—	—	—	—	Not Occupied	8	—	—	—	—	—

X135 Engine Jumper Wiring Harness to Oil Pump Flow Control Solenoid Valve Wire Wiring Harness (L8T)

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Connector Part Information

Harness Type: Engine Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

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Connector Part Information

Harness Type: Oil Pump Flow Control Solenoid Valve Wire Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

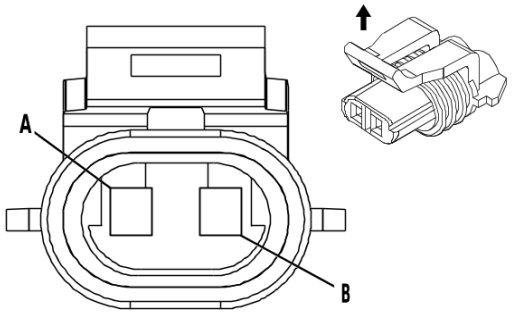
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	No Tool Required	No Tool Required

X135 Engine Jumper Wiring Harness to Oil Pump Flow Control Solenoid Valve Wire Wiring Harness (L8T)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	VT / D-BU	5293	I	—	Powertrain Main Relay Fused Supply Voltage 4	1	—	VT / D-BU	5293	II	—
2	—	D-BU	179	I	—	Engine Oil Pump Control	2	—	D-BU	179	II	—

X141 Instrument Panel Wiring Harness to Brake Fluid Level Indicator Wiring Harness



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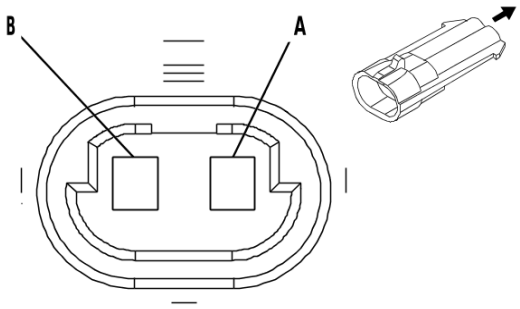


605500

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12052644
Service Connector: 19368034
Description: 2-Way F 150 Metri-Pack Series, Sealed(GY)

Connector Part Information

Harness Type: Brake Fluid Level Indicator Wiring Harness
OEM Connector: 12162343
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 Metri-Pack Series, Sealed(GY)

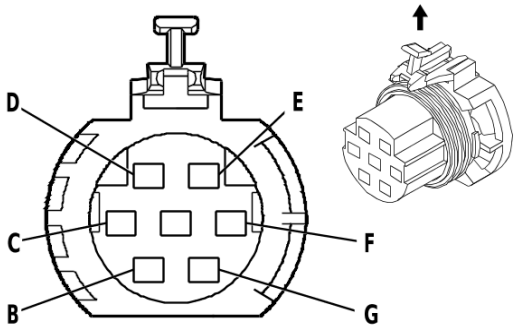
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X141 Instrument Panel Wiring Harness to Brake Fluid Level Indicator Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	TN / WH	33	I	—	Brake Warning Indicator Control	A	0.5	TN / WH	33	II	—
B	0.5	BK / WH	351	I	—	Signal Ground	B	0.5	BK	350	II	—

X150 Instrument Panel Wiring Harness to Forward Lamp Wiring Harness



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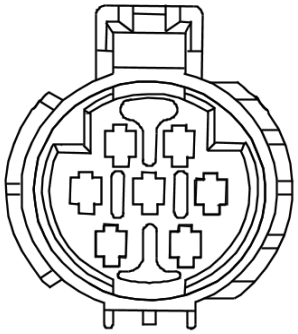


258231

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12110751
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280 Metri-Pack Flexlock Series, Sealed(BK)

Connector Part Information

Harness Type: Forward Lamp Wiring Harness
OEM Connector: 12110753
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way M 280 Metri-Pack Series, Sealed(BK)

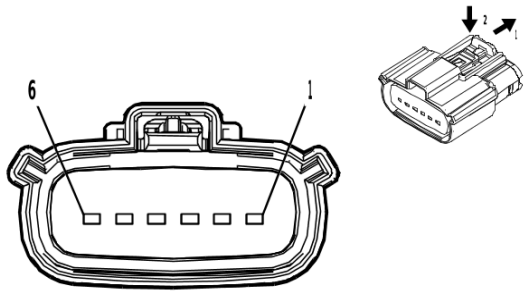
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	No Tool Required	No Tool Required
III	Not required	J-35616-5 (PU)	No Tool Required
IV	Not required	No Tool Required	No Tool Required

X150 Instrument Panel Wiring Harness to Forward Lamp Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	BN / GN	109	I	—	Hood Ajar Switch Signal	A	0.5	BN / GN	109	III	—
B	0.5	PU	5531	I	—	Hood Closed Switch Signal	B	0.5	BK / BN	5531	III	—
C	0.5	D-BU / GY	636	I	—	Ambient Air Temperature Sensor Signal	C	0.5	D-BU / GY	636	III	—
D	0.5	BK / D-BU	61	I	—	Ambient Air Temperature Sensor Low Reference	D	0.5	BK / D-BU	61	III	—
E	0.5	BK / L-GN	580	II	LV1/ L8T	Engine Control Sensors Low Reference 2	E	0.5	BK / L-GN	580	IV	LV1/ L8T
F	0.5	D-BU / GY	636	II	LV1/ L8T	Ambient Air Temperature Sensor Signal	F	0.5	D-BU / GY	636	IV	LV1/ L8T
G	—	—	—	—	—	Not Occupied	G	—	—	—	—	—

X155 Engine Wiring Harness to Engine Coolant Temperature Sensor Wiring Harness (L8T)



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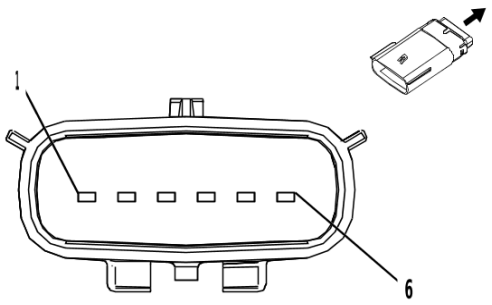


3277908

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 35432115
Service Connector: 86801953
Description: 6-Way F 1.5 Series, Sealed(BK)

Connector Part Information

Harness Type: Engine Coolant Temperature Sensor Wiring Harness
OEM Connector: 33481-6601
Service Connector: 86801953
Description: 6-Way M 1.5 MX Series, Sealed(BK)

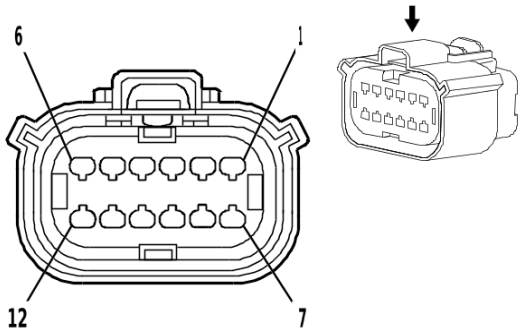
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	No Tool Required	No Tool Required

X155 Engine Wiring Harness to Engine Coolant Temperature Sensor Wiring Harness (L8T)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	D-BU	410	I	—	Engine Coolant Temperature Sensor Signal	1	0.5	D-BU	410	II	—
2	0.5	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	2	0.5	BK / YE	548	II	—
3	0.5	YE / BN	331	I	—	Oil Pressure Sensor Signal	3	0.5	YE / BN	331	II	—
4	0.5	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	4	0.5	BK / YE	548	II	—
5	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	5	0.5	WH / RD	480	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X160 Engine Wiring Harness to Fuel Injector Wiring Harness (L8T)



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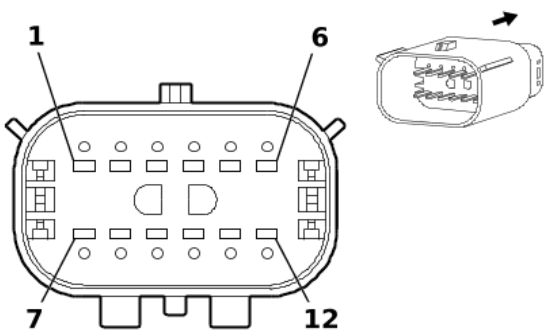


1825167

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13595088
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13503542
Service Connector: 19352907
Description: 12-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	No Tool Required	No Tool Required

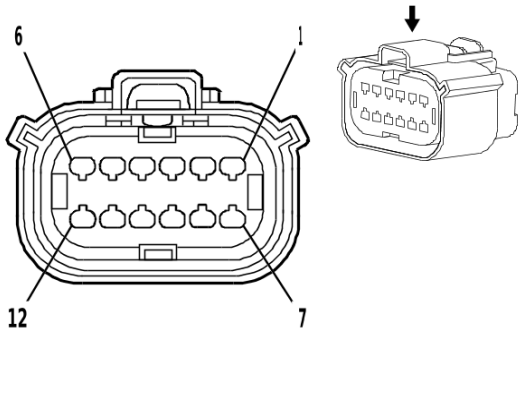
X160 Engine Wiring Harness to Fuel Injector Wiring Harness (L8T)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN / WH	4901	I	—	Direct Fuel Injector High Voltage Supply Cylinder 1	1	0.75	BN / WH	4901	II	—
2	0.75	L-GN / GY	4903	I	—	Direct Fuel Injector High Voltage Supply Cylinder 3	2	0.75	L-GN / GY	4903	II	—
3	0.75	L-GN / WH	4905	I	—	Direct Fuel Injector High Voltage Supply Cylinder 5	3	0.75	L-GN / WH	4905	II	—
4	0.75	WH / YE	4907	I	—	Direct Fuel Injector High Voltage Supply Cylinder 7	4	0.75	WH / YE	4907	II	—
5	0.75	BN	4801	I	—	Direct Fuel Injector High Voltage Control Cylinder 1	5	0.75	BN	4801	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X160 Engine Wiring Harness to Fuel Injector Wiring Harness (L8T) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.75	L-GN	4803	I	—	Direct Fuel Injector High Voltage Control Cylinder 3	7	0.75	L-GN	4803	II	—
8	0.75	WH / L-GN	4805	I	—	Direct Fuel Injector High Voltage Control Cylinder 5	8	0.75	WH / L-GN	4805	II	—
9	0.75	YE / GY	4807	I	—	Direct Fuel Injector High Voltage Control Cylinder 7	9	0.75	YE / GY	4807	II	—
10	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	10	0.5	WH / RD	480	II	—
11	0.5	D-BU / WH	2918	I	—	Fuel Rail Pressure Sensor Signal	11	0.5	D-BU / WH	2918	II	—
12	0.5	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	12	0.5	BK / YE	548	II	—

X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LV1)



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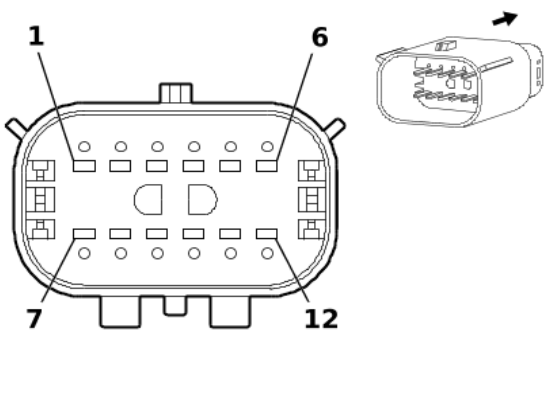


1825167

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13609715
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: 13503543
Service Connector: 19352907
Description: 12-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	No Tool Required	No Tool Required

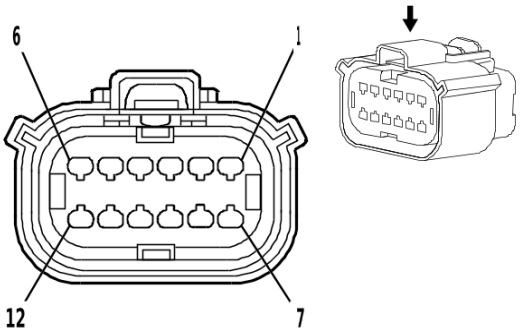
X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LV1)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.75	BN / WH	4901	I	—	Direct Fuel Injector High Voltage Supply Cylinder 1	2	0.75	BN / WH	4901	II	—
3	0.75	L-GN / GY	4903	I	—	Direct Fuel Injector High Voltage Supply Cylinder 3	3	0.75	L-GN / GY	4903	II	—
4	0.75	L-GN / WH	4905	I	—	Direct Fuel Injector High Voltage Supply Cylinder 5	4	0.75	L-GN / WH	4905	II	—
5	0.75	BN	4801	I	—	Direct Fuel Injector High Voltage Control Cylinder 1	5	0.75	BN	4801	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—
8	0.75	L-GN	4803	I	—	Direct Fuel Injector High Voltage Control Cylinder 3	8	0.75	L-GN	4803	II	—

X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LV1) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.75	WH / L-GN	4805	I	—	Direct Fuel Injector High Voltage Control Cylinder 5	9	0.75	WH / L-GN	4805	II	—
10	0.5	WH / RD	480	I	—	Engine Control Vehicle Sensors 5 Volt Reference 1	10	0.5	WH / RD	480	II	—
11	0.5	D-BU / WH	2918	I	—	Fuel Rail Pressure Sensor Signal	11	0.5	D-BU / WH	2918	II	—
12	0.5	BK / YE	548	I	—	Engine Control Sensors Low Reference 1	12	0.5	BK / YE	548	II	—

X161 Engine Wiring Harness to Fuel Injector Wiring Harness (L8T)



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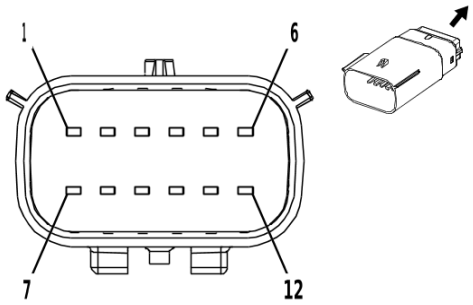


2687960

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13922706
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	No Tool Required	No Tool Required

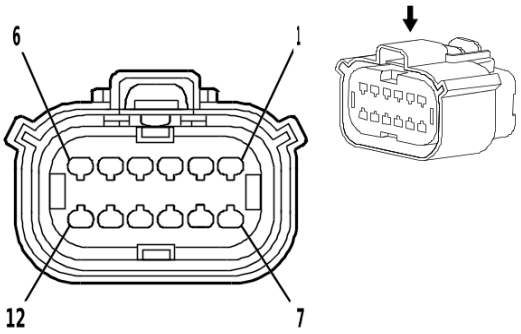
X161 Engine Wiring Harness to Fuel Injector Wiring Harness (L8T)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	D-BU / GY	4902	I	—	Direct Fuel Injector High Voltage Supply Cylinder 2	1	0.75	D-BU / GY	4902	II	—
2	0.75	D-BU / WH	4904	I	—	Direct Fuel Injector High Voltage Supply Cylinder 4	2	0.75	D-BU / WH	4904	II	—
3	0.75	VT / GY	4906	I	—	Direct Fuel Injector High Voltage Supply Cylinder 6	3	0.75	VT / GY	4906	II	—
4	0.75	GY / WH	4908	I	—	Direct Fuel Injector High Voltage Supply Cylinder 8	4	0.75	GY / WH	4908	II	—
5	0.75	D-BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	5	0.75	D-BU	4802	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—

X161 Engine Wiring Harness to Fuel Injector Wiring Harness (L8T) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.75	GY / D-BU	4804	I	—	Direct Fuel Injector High Voltage Control Cylinder 4	8	0.75	GY / D-BU	4804	II	—
9	0.75	VT / L-GN	4806	I	—	Direct Fuel Injector High Voltage Control Cylinder 6	9	0.75	VT / L-GN	4806	II	—
10	0.75	GY	4808	I	—	Direct Fuel Injector High Voltage Control Cylinder 8	10	0.75	GY	4808	II	—
11	0.75	VT / BK	7300	I	—	High Pressure Fuel Pump Low Control	11	0.75	VT / BK	7300	II	—
12	0.75	YE	7301	I	—	High Pressure Fuel Pump High Control	12	0.75	YE	7301	II	—

X161 Engine Wiring Harness to Fuel Injector Wiring Harness (LV1)



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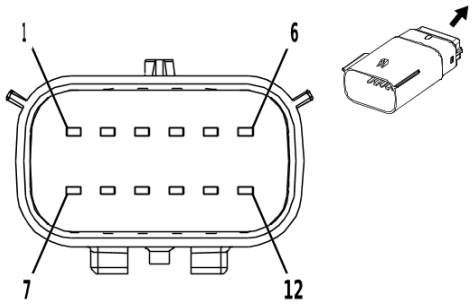


2687960

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 13863397
Service Connector: 19352907
Description: 12-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Fuel Injector Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	No Tool Required	No Tool Required

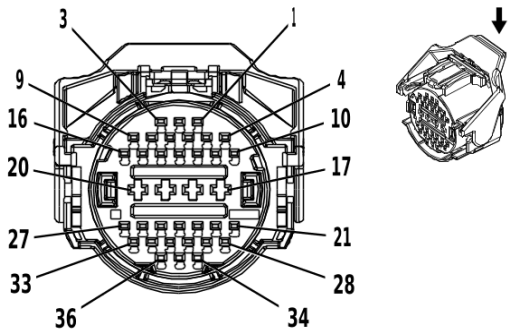
X161 Engine Wiring Harness to Fuel Injector Wiring Harness (LV1)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	—	—	—	—	Not Occupied	1	—	—	—	—	—
2	0.75	D-BU / GY	4902	I	—	Direct Fuel Injector High Voltage Supply Cylinder 2	2	0.75	D-BU / GY	4902	II	—
3	0.75	D-BU / WH	4904	I	—	Direct Fuel Injector High Voltage Supply Cylinder 4	3	0.75	D-BU / WH	4904	II	—
4	0.75	VT / GY	4906	I	—	Direct Fuel Injector High Voltage Supply Cylinder 6	4	0.75	VT / GY	4906	II	—
5	0.75	D-BU	4802	I	—	Direct Fuel Injector High Voltage Control Cylinder 2	5	0.75	D-BU	4802	II	—
6 - 7	—	—	—	—	—	Not Occupied	6 - 7	—	—	—	—	—
8	0.75	GY / D-BU	4804	I	—	Direct Fuel Injector High Voltage Control Cylinder 4	8	0.75	GY / D-BU	4804	II	—

X161 Engine Wiring Harness to Fuel Injector Wiring Harness (LV1) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
9	0.75	VT / L-GN	4806	I	—	Direct Fuel Injector High Voltage Control Cylinder 6	9	0.75	VT / L-GN	4806	II	—
10	0.75	VT / BK	7300	I	—	High Pressure Fuel Pump Low Control	10	0.75	VT / BK	7300	II	—
11	0.75	YE	7301	I	—	High Pressure Fuel Pump High Control	11	0.75	YE	7301	II	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—

X175 Engine Wiring Harness to Automatic Transmission Wiring Harness (M5U)



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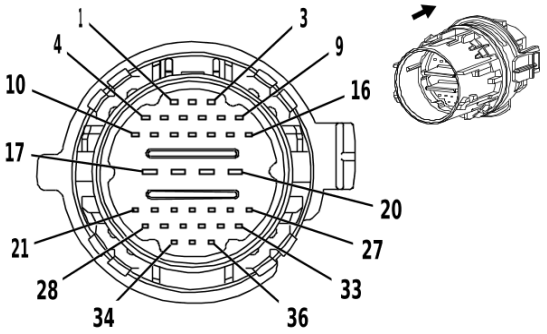


3977661

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15504573
Service Connector: 19329922
Description: 36-Way F 1.2 MCON-CB, 2.8 MCP Series, Sealed(BK)

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 2321030-5
Service Connector: 19329922
Description: 36-Way M 1.2 MCON, 2.8 MPQ Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575368	J-35616-35 (VT)	J-38125-36
II	19300445	J-35616-12 (BU)	J-38125-11A
III	Not required	No Tool Required	No Tool Required
III	Not required	No Tool Required	No Tool Required

X175 Engine Wiring Harness to Automatic Transmission Wiring Harness (M5U)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	L-GN / WH	6380	II	—	Torque Converter Clutch Enable Solenoid Valve A Control	1	0.5	L-GN / WH	6380	III	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.5	VT / WH	422	II	—	Torque Converter Clutch Solenoid Valve Control	3	0.5 0.5	VT / WH YE / BN	422 6404	III III	M5U/ MQD LWN+ MQD
4	0.5	GN / WH	1530	II	—	Transmission Line Pressure Control Solenoid Valve Control	4	0.5	GY / L-GN	6403	III	LWN+ MQD
5	0.5	BN	6400	II	—	Clutch Solenoid Valve A Control	5	0.5	BN	6400	III	—
6	0.5	D-BU	6401	II	—	Clutch Solenoid Valve B Control	6	0.5	D-BU	6401	III	—

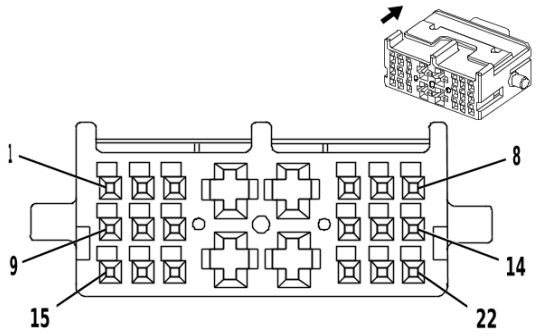
X175 Engine Wiring Harness to Automatic Transmission Wiring Harness (M5U) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.5	YE / BN	6210	II	—	Torque Converter Clutch Enable Solenoid Valve B Control	7	0.5	YE / BN	6210	III	—
8 - 9	—	—	—	—	—	Not Occupied	8 - 9	—	—	—	—	—
10	0.5	GY	6402	II	—	Clutch Solenoid Valve C Control	10	0.5	GY	6402	III	—
11	0.5	BK / BN	586	II	—	Transmission Fluid Temperature Sensor Low Reference	11	0.5	OG / BK	586	III	—
12	0.5	BN / WH	585	II	—	Transmission Fluid Temperature Sensor Signal	12	0.5	BN / WH	585	III	—
13	0.5	WH	4508	II	—	Transmission Clutch G Control	13	0.5	WH	4508	III	—
14	0.5	WH / D-BU	4507	II	—	Transmission Clutch H Control	14	0.5	WH / D-BU	4507	III	—
15 - 17	—	—	—	—	—	Not Occupied	15 - 17	—	—	—	—	—
18	0.5	L-GN / GY	6387	I	—	Transmission High Side Driver 1 Control	18	0.5	L-GN / GY	6387	III	—
19	0.75	GY / BN	6388	I	—	Transmission High Side Driver 2 Control	19	0.75	GY / BN	6388	III	—
20	—	—	—	—	—	Not Occupied	20	—	—	—	—	—
21	0.5	L-GN / YE	3337	II	—	Transmission Internal Mode Switch Mode Control Y	21	0.5	GN / YE	3337	III	—
22	0.5	D-BU / WH	3338	II	—	Transmission Internal Mode Switch Mode Control X	22	0.5	BU / WH	3338	III	—
23	—	—	—	—	—	Transmission Range Switch Signal P	23	—	—	4168	III	—
24	0.5	GY / D-BU	6358	II	—	Output Speed Signal	24	0.5	GY / BU	6358	III	—
25	0.5	YE / L-GN	4170	II	—	Transmission Output Shaft Speed Sensor Circuit 9V Reference	25	0.5	YE / GN	4170	III	—

X175 Engine Wiring Harness to Automatic Transmission Wiring Harness (M5U) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
26	0.5	L-GN / YE	6353	II	—	Input Speed Signal	26	0.5	GN / YE	6353	III	—
27	0.5	YE / D-BU	4171	II	—	Transmission Input Shaft Speed Sensor Circuit 9V Reference	27	—	WH / RD	4171	III	—
28	—	—	—	—	—	Transmission Range Switch Signal B	28	—	—	5982	III	—
29	0.5	WH / RD	480	II	—	Engine Control Vehicle Sensors 5 Volt Reference 1	29	0.5	WH / RD	596	III	—
30	0.5	BK / GY	626	II	—	Engine Control Vehicle Sensors Low Reference 1	30	— 0.5	BK / GY BK / GY	3927 626	III III	LWN+ MQD LV1+ M5U
31	—	—	—	—	—	Transmission Output Shaft Speed Sensor Circuit 9V Reference	31	—	—	4170	III	—
32	0.5	L-GN / VT	4510	II	—	Transmission Intermediate Speed Signal	32	0.5	GN / VT	4510	III	—
33	—	—	—	—	—	Not Occupied	33	—	—	—	—	—
34	—	—	—	—	—	Transmission Range Switch Signal S	34	—	—	4169	III	—
35	—	—	—	—	—	Transmission Park/Neutral Signal 1	35	—	—	1786	III	—
36	—	—	—	—	—	Not Occupied	36	—	—	—	—	—

X176 Automatic Transmission Wiring Harness to Automatic Transmission Wiring Harness (M5U)



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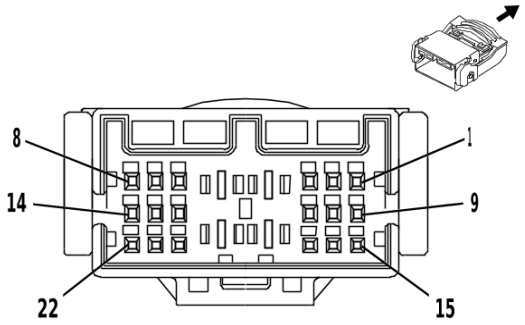


3977770

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 1897543-1
Service Connector: Service by Harness - See Part Catalog
Description: 22-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series(NA)

Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 1897540-1
Service Connector: Service by Harness - See Part Catalog
Description: 22-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series(NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	No Tool Required	No Tool Required

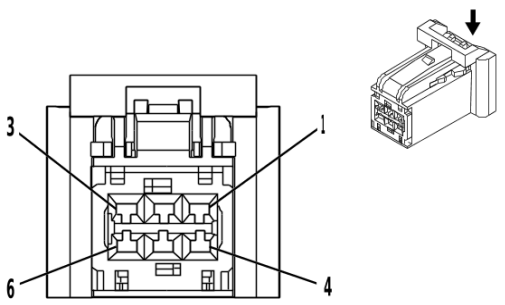
X176 Automatic Transmission Wiring Harness to Automatic Transmission Wiring Harness (M5U)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	L-GN / WH	6380	I	—	Torque Converter Clutch Enable Solenoid Valve A Control	1	—	L-GN / WH	6380	II	—
2	—	BU / WH	3338	I	—	Transmission Internal Mode Switch Mode Control X	2	—	BU / WH	3338	II	—
3	—	—	—	—	—	Not Occupied	3	—	—	—	—	—
4	—	L-GN / GY	6387	I	—	Transmission High Side Driver 1 Control	4	—	L-GN / GY	6387	II	—
5	—	WH / RD	596	I	—	5V Reference	5	—	WH / RD	596	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	—	WH / D-BU	4507	I	—	Transmission Clutch H Control	7	—	WH / D-BU	4507	II	—

X176 Automatic Transmission Wiring Harness to Automatic Transmission Wiring Harness (M5U) (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	—	GY / L-GN	6403	I	—	Clutch Solenoid Valve D Control	8	—	GY / L-GN	6403	II	—
9	—	WH	4508	I	—	Transmission Clutch G Control	9	—	WH	4508	II	—
10	—	YE / BN	6210	I	—	Torque Converter Clutch Enable Solenoid Valve B Control	10	—	YE / BN	6210	II	—
11	—	GN / YE	3337	I	—	Transmission Internal Mode Switch Mode Control Y	11	—	GN / YE	3337	II	—
12	—	—	—	—	—	Not Occupied	12	—	—	—	—	—
13	—	GY	6402	I	—	Clutch Solenoid Valve C Control	13	—	GY	6402	II	—
14	—	YE / BN	6404	I	—	Clutch Solenoid Valve E Control	14	—	YE / BN	6404	II	—
15	—	BN / WH	585	I	—	Transmission Fluid Temperature Sensor Signal	15	—	BN / WH	585	II	—
16	—	OG / BK	586	I	—	Transmission Fluid Temperature Sensor Low Reference	16	—	OG / BK	586	II	—
17	—	—	—	—	—	Not Occupied	17	—	—	—	—	—
18	—	GY / BN	6388	I	—	Transmission High Side Driver 2 Control	18	—	GY / BN	6388	II	—
19	—	—	—	—	—	Not Occupied	19	—	—	—	—	—
20	—	BK / GY	3927	I	—	Transmission Internal Mode Switch Feedback Signal	20	—	BK / GY	3927	II	—
21	—	BN	6400	I	—	Clutch Solenoid Valve A Control	21	—	BN	6400	II	—
22	—	D-BU	6401	I	—	Clutch Solenoid Valve B Control	22	—	D-BU	6401	II	—

X178 Automatic Transmission Wiring Harness to Automatic Transmission Output Speed Sensor Wiring Harness (M5U)



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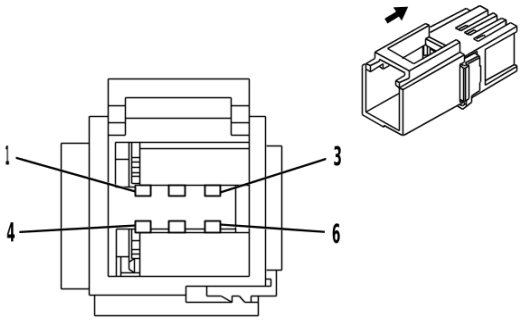

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Connector Part Information

Harness Type: Automatic Transmission Wiring Harness
OEM Connector: 33134940
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 OCS Series(NA)

Connector Part Information

Harness Type: Automatic Transmission Output Speed Sensor Wiring Harness
OEM Connector: 13955963
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 0.64 II Series(GY)

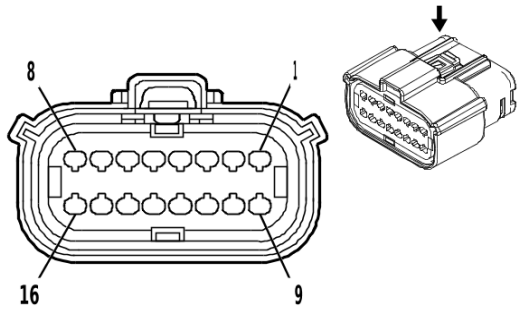
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	No Tool Required	No Tool Required

X178 Automatic Transmission Wiring Harness to Automatic Transmission Output Speed Sensor Wiring Harness (M5U)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	—	GY / BU	6358	I	—	Output Speed Signal	1	—	YE	6358	II	—
2	—	YE / GN	4170	I	—	Transmission Output Shaft Speed Sensor Circuit 9V Reference	2	—	RD	4170	II	—
3	—	YE / GN	4170	I	—	Transmission Output Shaft Speed Sensor Circuit 9V Reference	3	—	WH	4170	II	—
4	—	WH / RD	4171	I	—	Transmission Input Shaft Speed Sensor Circuit 9V Reference	4	—	WH	4171	II	—
5	—	GN / YE	6353	I	—	Input Speed Signal	5	—	GN	6353	II	—
6	—	GN / VT	4510	I	—	Transmission Intermediate Speed Signal	6	—	BK	4510	II	—

X185 Instrument Panel Wiring Harness to Chassis Wiring Harness



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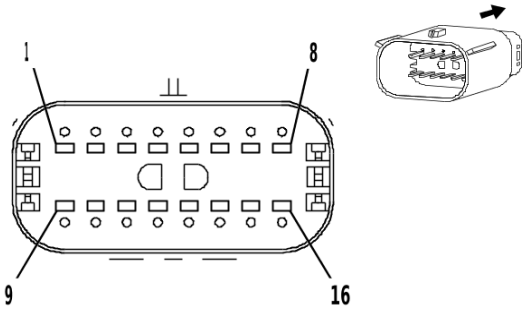


2548390

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13778557
Service Connector: 13584788
Description: 16-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33372790
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M 1.5 MX Series, Sealed(BK)

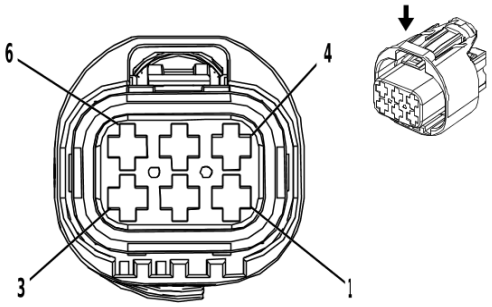
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	J-35616-3 (GY)	No Tool Required

X185 Instrument Panel Wiring Harness to Chassis Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD / L-GN	3140	I	—	Battery Positive Voltage	1	0.5	RD / L-GN	3140	II	—
2	0.5	L-GN	5060	I	—	Low Speed GMLAN Serial Data	2	0.5	L-GN	5060	II	—
3 - 7	—	—	—	—	—	Not Occupied	3 - 7	—	—	—	—	—
8	0.5	BU / YE	6105	I	—	High Speed GMLAN Serial Data [+] 2	8	0.5	D-BU / YE	6105	II	—
9	0.5	GY / YE	5853	I	—	Driver Side Side Object Detection LED Signal 1	9	0.5	GY / YE	5853	II	—
10	0.5	GY	5861	I	—	Passenger Side Object Detection LED Signal 1	10	0.5	GY	5861	II	—
11 - 14	—	—	—	—	—	Not Occupied	11 - 14	—	—	—	—	—
15	0.5	L-GN / BN	2087	I	—	Multi-axis Acceleration Sensor Supply Voltage	15	0.5	L-GN / BN	2087	II	—
16	0.5	WH	6106	I	—	High Speed GMLAN Serial Data [-] 2	16	0.5	WH	6106	II	—

X190 Accessory Wiring Harness to Accessory Power Fuse Block Rear Wiring Harness Extension Harness



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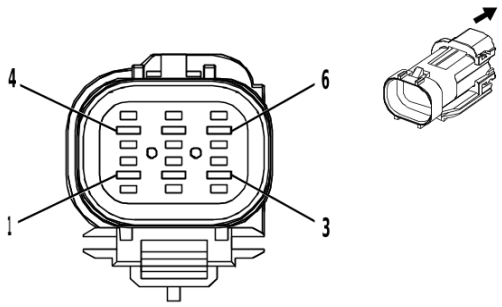


2042939

Connector Part Information

Harness Type: Accessory Wiring Harness
OEM Connector: 10865192
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 2.8 Junior Power Timer Series, Sealed(BK)

Connector Part Information

Harness Type: Accessory Power Fuse Block Rear Wiring Harness Extension Harness
OEM Connector: 10865189
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 2.8 Series, Sealed(BK)

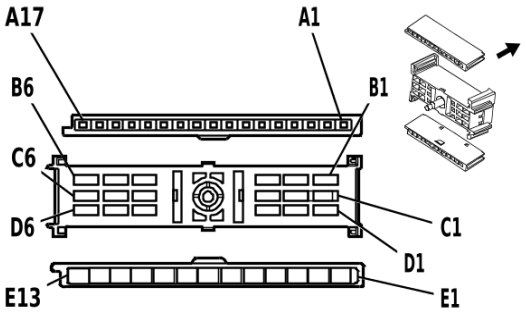
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X190 Accessory Wiring Harness to Accessory Power Fuse Block Rear Wiring Harness Extension Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	L-BU	6842	I	—	Auxiliary Device Relay 1 Control	1	0.5	BK / L-BU	6842	II	—
2	2.5	L-GN	6839	I	—	Auxiliary Device 1 Switched Voltage	2	2.5	L-GN	6839	II	—
3	0.5	D-BU	6843	I	—	Auxiliary Device Relay 2 Control	3	0.5	D-BU	6843	II	—
4	2.5	L-GN	6840	I	—	Auxiliary Device 2 Switched Voltage	4	2.5	L-GN	6840	II	—
5	1	RD / WH	5440	I	—	Battery Positive Voltage	5	1	RD / WH	5440	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X200 Steering Wheel Air Bag Coil Jumper Wiring Harness to Instrument Panel Wiring Harness



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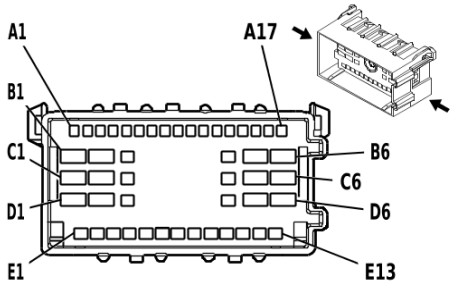

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Connector Part Information

Harness Type: Steering Wheel Air Bag Coil Jumper Wiring Harness

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 48-Way F

Connector Part Information

Harness Type: Instrument Panel Wiring Harness

OEM Connector: 15492579

Service Connector: 88988982

Description: 48-Way M 150, 280, 630 Metri-Pack Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	13505668	J-35616-3 (GY)	J-38125-12A
III	13575715	J-35616-5 (PU)	J-38125-11A
IV	19330180	J-35616-43 (RD)	J-38125-11A

X200 Steering Wheel Air Bag Coil Jumper Wiring Harness to Instrument Panel Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.35	TN	28	I	—	Horn Relay Control	A1	0.35	TN	28	II	—
A2	—	—	—	—	—	Not Occupied	A2	—	—	—	—	—
A3	0.35	PK	1444	I	—	12V Reference	A3	0.35	PK	1444	II	—
A4	0.35	PU	5526	I	—	Tap Up/Tap Down Switch Signal	A4	0.35	PU	5526	II	—
A5	—	—	—	—	—	Not Occupied	A5	—	—	—	—	—
A6	0.5	L-GN / BN	2087	I	—	Multi-axis Acceleration Sensor Supply Voltage	A6	0.5	L-GN / BN	2087	II	—
A7 - A8	—	—	—	—	—	Not Occupied	A7 - A8	—	—	—	—	—
A9	0.35	PK	3	I	—	Run/Crank Ignition 1 Voltage	A9	0.35	PK	3	II	—

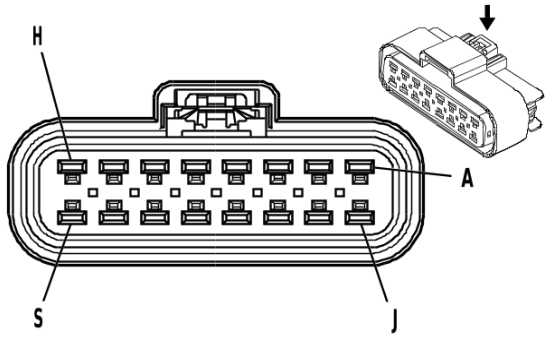
X200 Steering Wheel Air Bag Coil Jumper Wiring Harness to Instrument Panel Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1-0	—	—	—	—	—	Not Occupied	A1-0	—	—	—	—	—
A1-1	0.35	L-GN	6818	I	—	Steering Wheel Controls Signal 1	A11	0.35	L-GN	6818	II	—
A1-2	—	—	—	—	—	Not Occupied	A1-2	—	—	—	—	—
A1-3	0.35	D-GN / WH	7158	I	—	Cruise Control Indicator Dimming Signal	A1-3	0.35	D-GN / WH	7158	II	—
A1-4	—	—	—	—	—	Not Occupied	A1-4	—	—	—	—	—
A1-5	0.35	BN	6136	I	—	Control	A1-5	0.35	BN	6136	II	—
A1-6	—	—	—	—	—	Not Occupied	A1-6	—	—	—	—	—
A1-7	0.35	GY	1884	I	—	Cruise Control Set/ Coast/Resume/Accelerate Switch Signal	A1-7	0.35	GY	1884	II	—
B1	0.35	RD / WH	540	I	—	Battery Positive Voltage	B1	0.35	RD / WH	540	IV	—
B2	—	—	—	—	—	Not Occupied	B2	—	—	—	—	—
B3	0.35	WH	111	I	—	Hazard Warning Switch Signal	B3	0.35	WH	111	III	—
B4 - B5	—	—	—	—	—	Not Occupied	B4 - B5	—	—	—	—	—
B6	0.35	PK	1020	I	—	Off/Run/ Crank Ignition Voltage	B6	0.35	PK	1020	IV	—
C1	0.35	WH	530	I	—	Off/Run/ Crank Ignition Voltage	C1	0.35	WH	530	IV	—
C2	—	—	—	—	—	Not Occupied	C2	—	—	—	—	—
C3	0.35	YE	307	I	—	Headlamp Switch Flash Signal	C3	0.35	YE	307	III	—
C4 - C5	—	—	—	—	—	Not Occupied	C4 - C5	—	—	—	—	—
C6	0.35	BN	4	I	—	Accessory Ignition Voltage	C6	0.35	BN	4	IV	—
D1	0.35	TN / BK	6009	I	—	Windshield Wiper Switch Low Reference	D1	0.35	TN / BK	6009	IV	—
D2	—	—	—	—	—	Not Occupied	D2	—	—	—	—	—

X200 Steering Wheel Air Bag Coil Jumper Wiring Harness to Instrument Panel Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
D3	0.35	YE	525	I	—	High Beam Select Switch Low Beam Signal	D3	0.35	YE	525	III	—
D4	0.5	TN / WH	816	I	—	Brake Transmission Shift Interlock Solenoid Actuator Control	D4	0.5	TN / WH	816	III	—
D5	—	—	—	—	—	Not Occupied	D5	—	—	—	—	—
D6	0.35	PK	94	I	—	Windshield Washer Switch Signal	D6	0.35	PK	94	IV	—
E1	0.5	BK	350	I	—	Ground	E1	0.5	BK	350	III	—
E2	—	—	—	—	—	Not Occupied	E2	—	—	—	—	—
E3	0.5	BK / WH	351	I	—	Signal Ground	E3	0.5	BK / WH	351	III	—
E4	0.5	BU / YE	6105	I	—	High Speed GMLAN Serial Data [+] 2	E4	0.5	BU / YE	6105	III	—
E5	0.5	WH	6106	I	—	High Speed GMLAN Serial Data [-] 2	E5	0.5	WH	6106	III	—
E6	0.5	BU / YE	6105	I	—	High Speed GMLAN Serial Data [+] 2	E6	0.5	BU / YE	6105	III	—
E7	0.5	WH	6106	I	—	High Speed GMLAN Serial Data [-] 2	E7	0.5	WH	6106	III	—
E8	0.35	D-GN	663	I	—	Hazard Switch Left Turn Signal	E8	0.35	D-GN	663	III	—
E9	0.35	TN	664	I	—	Hazard Switch Right Turn Signal	E9	0.35	TN	664	III	—
E1-0	—	—	—	—	—	Not Occupied	E1-0	—	—	—	—	—
E1-1	0.35	L-BU	1714	I	—	Windshield Wiper Switch Low Signal	E11	0.35	L-BU	1714	III	—
E1-2	0.35	L-GN	1715	I	—	Windshield Wiper Switch High Signal	E1-2	0.35	L-GN	1715	III	—
E1-3	0.35	D-GN	5060	I	—	Low Speed GMLAN Serial Data	E1-3	0.35	D-GN	5060	III	—

X202 Instrument Panel Wiring Harness to Engine Wiring Harness



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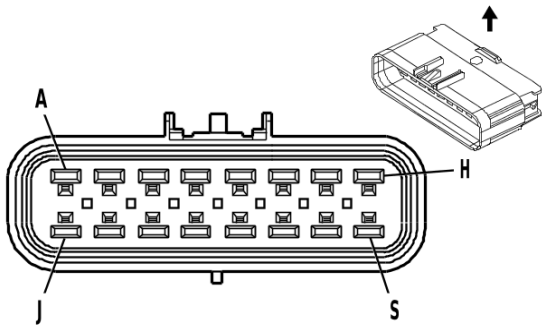

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Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15326666
Service Connector: 15326666
Description: 16-Way F 280 GT Series, Sealed(BK)

Connector Part Information

Harness Type: Engine Wiring Harness
OEM Connector: 15326667
Service Connector: 88986347
Description: 16-Way M 280 GT Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19353345	J-35616-4A (PU)	J-38125-215A
II	13575353	J-35616-5 (PU)	J-38125-215A

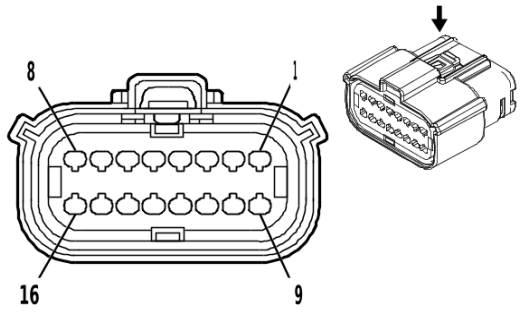
X202 Instrument Panel Wiring Harness to Engine Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	YE / VT	2378	I	—	Right Rear Outer Parking Assist Sensor Signal	A	0.5	YE / VT	2378	II	—
B	0.5	YE / WH	2377	I	—	Right Rear Middle Parking Assist Sensor Signal	B	0.5	YE / WH	2377	II	—
C	0.5 0.8	RD / WH BK	840 2840	I	— —	Battery Positive Voltage Battery Positive Voltage	C	0.5	RD / D-BU	840	II	—
D - E	—	—	—	—	—	Not Occupied	D - E	—	—	—	—	—
F	0.5	BN	5360	I	—	Brake Apply Sensor Low Reference	F	0.5	BK / GY	626	II	—
G	0.5	BN / WH	2374	I	—	Object Sensor Voltage Reference	G	0.5	BN / WH	2374	II	—
H	0.5	YE	2375	I	—	Left Rear Outer Parking Assist Sensor Signal	H	0.5	YE	2375	II	—

X202 Instrument Panel Wiring Harness to Engine Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
J	0.5	BK / GY	2379	I	—	Object Sensor Low Reference	J	0.5	BK / GY	2379	II	—
K - L	—	—	—	—	—	Not Occupied	K - L	—	—	—	—	—
M	0.5	RD / WH	4892	I	—	Auxiliary Battery Relay Control	M	0.5	RD / WH	4892	II	—
N	—	—	—	—	—	Not Occupied	N	—	—	—	—	—
P	0.5	YE	5361	I	—	Brake Apply Sensor Signal	P	0.5	WH / L-GN	5380	II	—
R	0.5	WH	5359	I	—	Brake Apply Sensor Control	R	0.5	D-BU / RD	460	II	—
S	0.5	YE / D-BU	2376	I	—	Left Rear Middle Parking Assist Sensor Signal	S	0.5	YE / D-BU	2376	II	—

X204 Body Wiring Harness to Roof Console Wiring Harness



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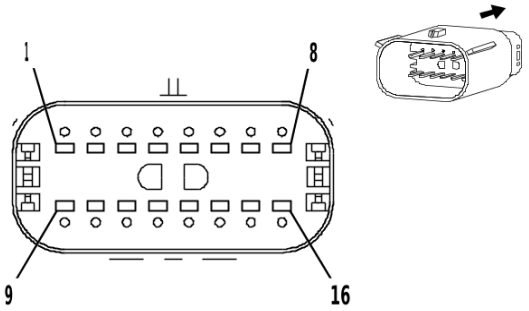


2548390

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13778557
Service Connector: 13584788
Description: 16-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 33372790
Service Connector: 19369662
Description: 16-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	Not required	No Tool Required	No Tool Required
III	19119395	J-35616-3 (GY)	J-38125-217

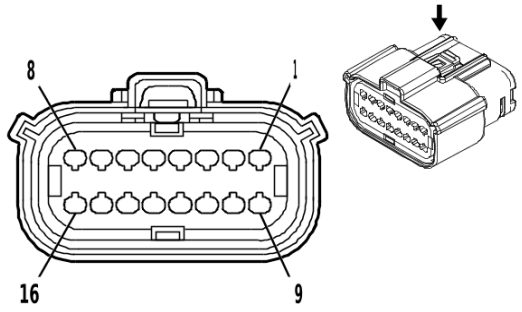
X204 Body Wiring Harness to Roof Console Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35 0.5	D-BU D-BU	7641 7641	I I	UVC UVC- (UEU/ UFL)	Frontview Camera 2 Signal [+] Frontview Camera 2 Signal [+]	1	0.5	D-BU	7641	III	—
2	0.5 0.35 0.5	L-BU L-BU L-BU	7642 7642 7642	II I I	- UEU/ UFL UVC UVC- (UEU/ UFL)	Frontview Camera 2 Signal [-] Frontview Camera 2 Signal [-] Frontview Camera 2 Signal [-]	2	0.5 0.5	WH D-BU	7642 7642	III III	UEU/ UFL UVC- (UEU/ UFL)
3	0.5	Bare	6799	I	—	Camera Shield Ground	3	0.5	Bare	6799	III	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	5	0.5 0.5	VT / WH PK	239 239	III III	UVC UVC- (UEU/ UFL)

X204 Body Wiring Harness to Roof Console Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—
7	0.8	D-GN	654	I	—	Cellular Telephone Microphone Low Reference	7	0.8	D-GN	654	III	—
8	0.8	GY	655	I	—	Cellular Telephone Microphone Signal	8	0.8	GY	655	III	—
9	0.5	L-GN	24	I	—	Backup Lamp Control Backup Lamp Control	9	0.5 0.5	L-GN / WH L-GN	24 24	III III	UVC UEU/ UFL
10	0.5	BK	1850	I	—	Ground	10	0.5	BK	1850	III	—
11	0.5	GY / WH	3153	I	—	Lane Departure Warning Disable Switch Signal	11	0.5	GY / WH	3153	III	—
12	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	12	0.5	L-GN	5060	III	—
13	—	—	—	—	—	Not Occupied	13	—	—	—	—	—
14	0.5	WH	3152	I	—	Lane Departure Warning Indicator Control	14	0.5	WH	3152	III	—
15	—	—	—	—	—	Not Occupied	15	—	—	—	—	—
16	0.5	RD / GN	3140	I	—	Battery Positive Voltage	16	0.5	RD / L-GN	3140	III	—

X205 Roof Console Wiring Harness to Body Wiring Harness



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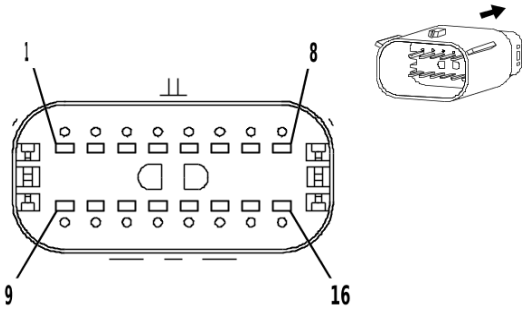


2548390

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 13778557
Service Connector: 13584788
Description: 16-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33372790
Service Connector: 19369662
Description: 16-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19368973	J-35616-2A (GY)	J-38125-217
II	19119395	J-35616-3 (GY)	J-38125-217

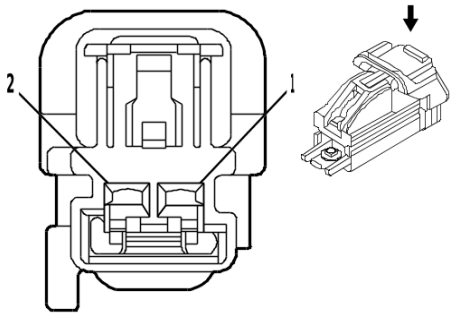
X205 Roof Console Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN	441	I	—	Run Ignition 3 Voltage	1	0.35	BN	441	II	—
2	0.5	OG	1925	I	—	Auxiliary Blower Motor Medium Speed Control 2	2	0.35	OG	1925	II	—
3	0.5	PK / BK	5265	I	—	Auxiliary HVAC Rear Control Signal	3	0.5	PK / BK	5265	II	—
4	0.35	GY	2599	I	—	Rear Mode Door Actuator Signal	4	0.35	GY	2599	II	—
5	0.5	WH	1924	I	—	Auxiliary Blower Motor High Speed Control	5	0.35	WH	1924	II	—
6	0.35	BN	341	I	—	Run Ignition 3 Voltage	6	0.35	BN	341	II	—
7	1 0.8	BK BK	1850 1850	I I	((C69/ DH6) - YF1) / (- YF1) (- DH6- C69) / (YF1)	Ground Ground	7	1	BK	1850	II	—

X205 Roof Console Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.5	D-BU / WH	149	I	—	Courtesy Lamp Control	8	0.5	D-BU / WH	149	II	—
9	0.5	BK / WH	351	I	—	Signal Ground	9	0.35	BK / WH	351	II	—
10	0.5	BN	5263	I	—	Auxiliary HVAC Rear Temperature Signal	10	0.5	BN	5263	II	—
11	0.35	D-GN	6134	I	—	Body Control Module LIN Bus 3	11	0.35	D-GN	6134	II	—
12	0.35	OG	2775	I	—	Rear Air Temperature Door Actuator Control	12	0.35	OG	2775	II	—
13	0.5	PU / WH	5264	I	—	Auxiliary HVAC Rear Mode Signal	13	0.5	PU / WH	5264	II	—
14	0.5	D-BU	1926	I	—	Auxiliary Blower Motor Low Speed Control 2	14	0.35	D-BU	1926	II	—
15	0.35	BN / WH	230	I	—	Instrument Panel Lamp Dimming Control	15	0.35	BN / WH	230	II	—
16	0.8	OG	1732	I	—	Control Module 12V Reference 3	16	0.8	OG	1732	II	—

X206 Instrument Panel Wiring Harness to Instrument Panel Wiring Harness



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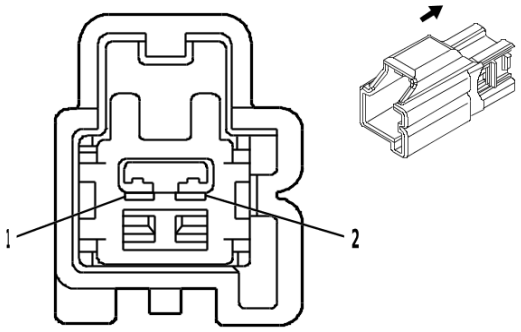


1853532

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 10846794
Service Connector: 19367525
Description: 2-Way F 1.5 YESC Series(L-GY)

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 10846798
Service Connector: 19367526
Description: 2-Way M 1.5 Series(L-GY)

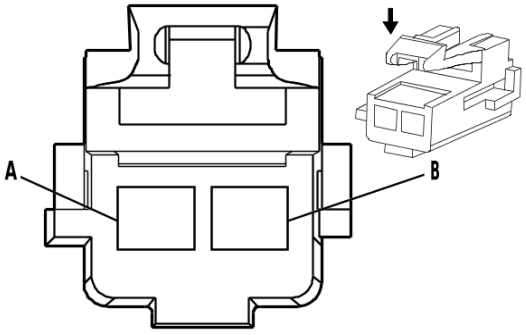
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X206 Instrument Panel Wiring Harness to Instrument Panel Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	L-BU	20	I	—	Stop Lamp Control	1	0.5	L-BU	20	II	—
2	0.5	BK	350	I	—	Ground	2	0.5	BK	350	II	—

X220 Instrument Panel Wiring Harness to Park Brake Switch Jumper Wiring Harness



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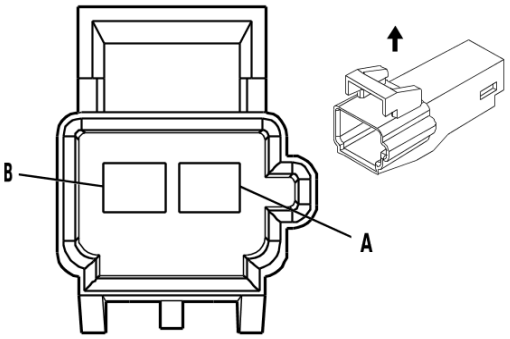


788072

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12129082
Service Connector: 15305896
Description: 2-Way F 280 Metri-Pack Flexlock Series(GY)

Connector Part Information

Harness Type: Park Brake Switch Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M (GY)

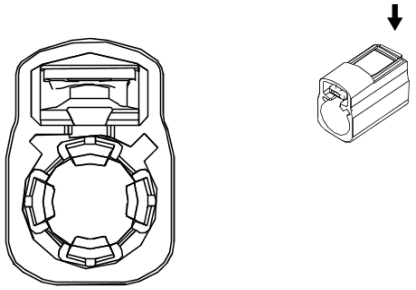
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	No Tool Required	No Tool Required

X220 Instrument Panel Wiring Harness to Park Brake Switch Jumper Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	L-BU	1134	I	—	Park Brake Switch Signal	A	0.35	L-BU	1134	II	—
B	—	—	—	—	—	Not Occupied	B	—	—	—	—	—

X221 Instrument Panel Wiring Harness to Antenna Wiring Harness



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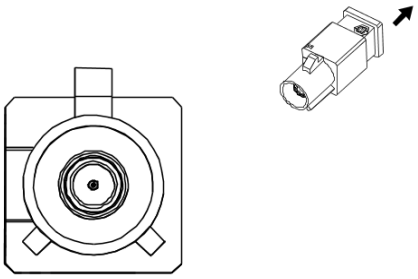


3275596

Connector Part Information

Harness Type: Instrument Panel Wiring Harness COAX

OEM Connector: 13616870

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type(BK)

Connector Part Information

Harness Type: Antenna Wiring Harness COAX

OEM Connector: Not Available

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M (BK)

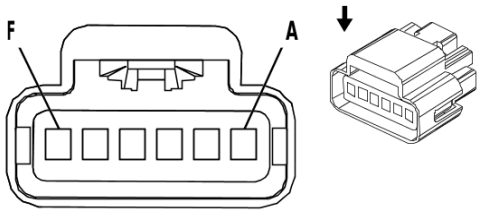
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required

X221 Instrument Panel Wiring Harness to Antenna Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
—	—	Coax Cable	—	I	—	(AM/FM) Antenna RF Signal	—	—	Coax Cable	—	I	—

X225 Accelerator Control Wiring Harness to Instrument Panel Wiring Harness



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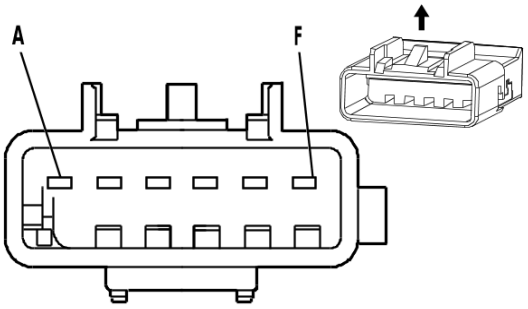


1464340

Connector Part Information

Harness Type: Accelerator Control Wiring Harness
OEM Connector: 13667186
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 150 GT FBT Series(BK)

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15332142
Service Connector: 19368863
Description: 6-Way M 150 GT Series(BK)

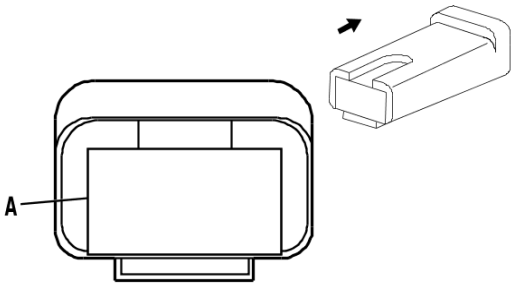
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X225 Accelerator Control Wiring Harness to Instrument Panel Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	BN / RD	1274	I	—	Accelerator Pedal Position 5V Reference 2	A	0.35	BN / RD	1274	II	—
B	0.35	WH / RD	1164	I	—	Accelerator Pedal Position 5V Reference 1	B	0.35	WH / RD	1164	II	—
C	0.35	YE / WH	1161	I	—	Accelerator Pedal Position Signal 1	C	0.35	YE / WH	1161	II	—
D	0.35	BK / D-BU	1271	I	—	Accelerator Pedal Position Low Reference 1	D	0.35	BK / D-BU	1271	II	—
E	0.35	BK / VT	1272	I	—	Accelerator Pedal Position Low Reference 2	E	0.35	BK / VT	1272	II	—
F	0.35	L-GN / WH	1162	I	—	Accelerator Pedal Position Signal 2	F	0.35	L-GN / WH	1162	II	—

X289 Side Access Panel Wiring Harness to Instrument Panel Wiring Harness



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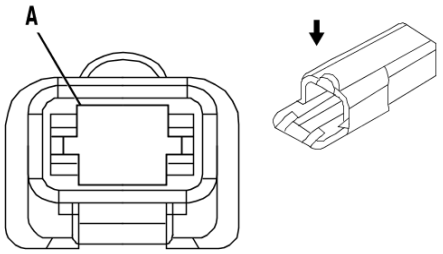


2698491

Connector Part Information

Harness Type: Side Access Panel Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 2984528
Service Connector: Not Available
Description: 1-Way M 56 Series(BK)

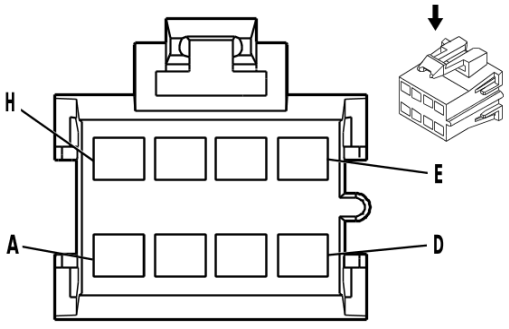
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	No Tool Required	No Tool Required

X289 Side Access Panel Wiring Harness to Instrument Panel Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	—	RD	1042	I	—	Battery Positive Voltage	A	—	RD / BK	1042	II	—

X290 Instrument Panel Wiring Harness to Side Access Panel Wiring Harness



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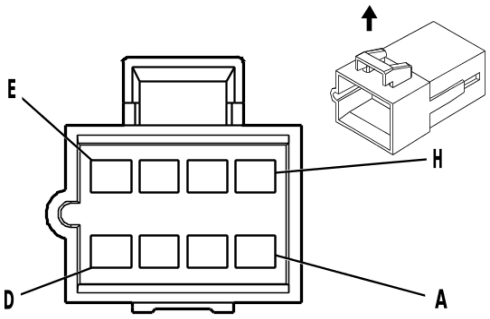


655684

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12064998
Service Connector: Not Available
Description: 8-Way F 280 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Side Access Panel Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M (BK)

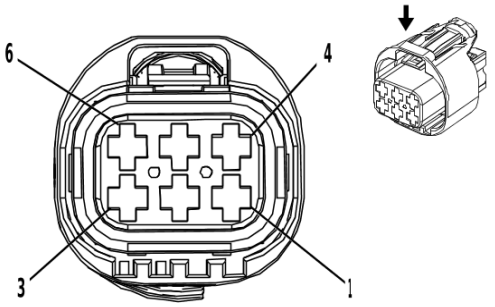
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	No Tool Required	No Tool Required

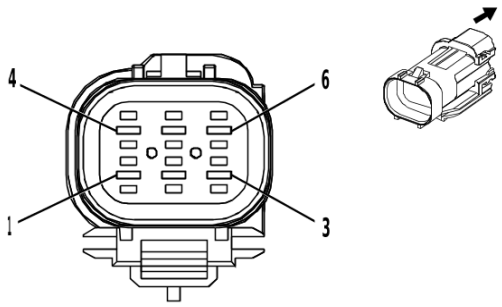
X290 Instrument Panel Wiring Harness to Side Access Panel Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	—	L-BU	244	I	—	Passenger Door Lock Switch Lock Control	A	—	L-BU / WH	244	II	—
B	—	L-BU	1344	I	—	Rear Compartment Lid Unlatch Relay Control	B	—	L-BU	1344	II	—
C	—	L-GN	1391	I	—	Left Front Door Lock Relay Control	C	—	L-GN	1391	II	—
D - F	—	—	—	—	—	Not Occupied	D - F	—	—	—	—	—
G	—	OG	1732	I	—	Control Module 12V Reference 3	G	—	RD	1732	II	—
H	—	YE	5810	I	—	Park Enable Signal	H	—	OG	5810	II	—

X291 Accessory Power Fuse Block Rear Wiring Harness Extension Harness to Accessory Power Fuse Block Rear Wiring Harness Extension Harness



2042938



2042939

Connector Part Information

Harness Type: Accessory Power Fuse Block Rear Wiring Harness Extension Harness

OEM Connector: 10865192

Service Connector: Service by Harness - See Part Catalog

Description: 6-Way F 2.8 Junior Power Timer Series, Sealed(BK)

Connector Part Information

Harness Type: Accessory Power Fuse Block Rear Wiring Harness Extension Harness

OEM Connector: 10865189

Service Connector: Service by Harness - See Part Catalog

Description: 6-Way M 2.8 Series, Sealed(BK)

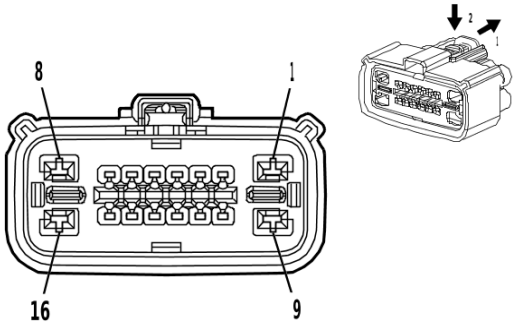
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X291 Accessory Power Fuse Block Rear Wiring Harness Extension Harness to Accessory Power Fuse Block Rear Wiring Harness Extension Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	L-GN	6840	I	—	Auxiliary Device 2 Switched Voltage	1	2.5	L-GN	6840	II	—
2	2.5	L-GN	6839	I	—	Auxiliary Device 1 Switched Voltage	2	2.5	L-GN	6839	II	—
3	0.5	D-BU	6843	I	—	Auxiliary Device Relay 2 Control	3	0.5	D-BU	6843	II	—
4	0.5	BK / L-BU	6842	I	—	Auxiliary Device Relay 1 Control	4	0.5	BK / L-BU	6842	II	—
5	1	RD / WH	5440	I	—	Battery Positive Voltage	5	1	RD / WH	5440	II	—
6	—	—	—	—	—	Not Occupied	6	—	—	—	—	—

X306 Body Wiring Harness to Seat Wiring Harness - Passenger



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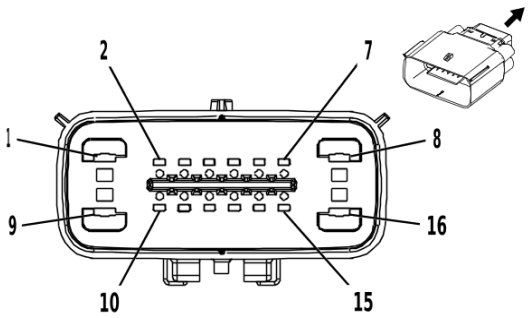


2373686

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33320906
Service Connector: 19368738
Description: 16-Way F 1.5, 2.8 MX Series, Sealed(YE)

Connector Part Information

Harness Type: Seat Wiring Harness - Passenger
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13576377	J-35616-2A (GY)	J-38125-12A
II	85528055	J-35616-2A (GY)	J-38125-217
III	Not required	No Tool Required	No Tool Required
IV	Not required	No Tool Required	No Tool Required
IV	Not required	No Tool Required	No Tool Required

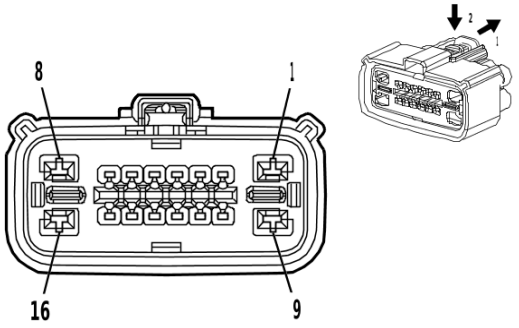
X306 Body Wiring Harness to Seat Wiring Harness - Passenger

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	BK	1850	I	—	Ground	1	3	BK	1850	IV	—
2	—	OG	1362	III	—	Passenger Seat Belt Switch Signal	2	—	OG	1362	IV	—
3	—	L-BU	1361	III	—	Passenger Seat Belt Switch Low Reference	3	—	PK	1361	IV	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	L-GN	2116	II	—	Passenger Seat Belt Pretensioner High Control	5	0.5	L-GN	2116	IV	—
6	0.5	OG	2117	II	—	Passenger Seat Belt Pretensioner Low Control	6	0.5	OG	2117	IV	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—
9	3	RD / WH	3540	I	—	Battery Positive Voltage	9	3	RD / WH	3540	IV	—

X306 Body Wiring Harness to Seat Wiring Harness - Passenger (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
10	0.5	L-GN	2136	II	—	Right Front Seat Side Air Bag Low Control	10	0.5	L-GN	2136	IV	—
11	0.5	TN / WH	2135	II	—	Right Front Seat Side Air Bag High Control	11	0.5	TN / WH	2135	IV	—
12 - 16	—	—	—	—	—	Not Occu-pied	12 - 16	—	—	—	—	—

X307 Body Wiring Harness to Seat Wiring Harness - Driver



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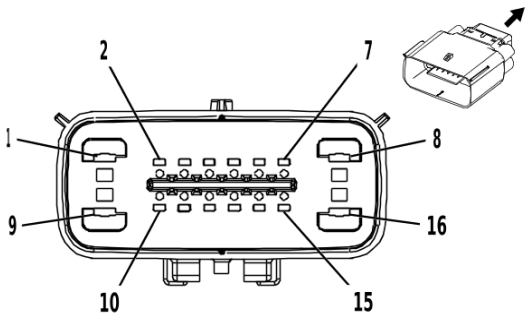


2373686

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 33320906
Service Connector: 19368738
Description: 16-Way F 1.5, 2.8 MX Series, Sealed(YE)

Connector Part Information

Harness Type: Seat Wiring Harness - Driver
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13576377	J-35616-2A (GY)	J-38125-12A
II	85528055	J-35616-2A (GY)	J-38125-217
III	Not required	No Tool Required	No Tool Required

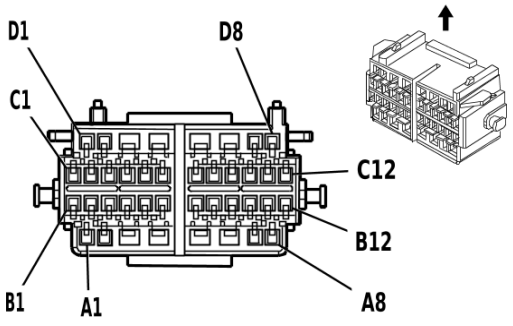
X307 Body Wiring Harness to Seat Wiring Harness - Driver

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	RD / WH	3540	I	—	Battery Positive Voltage	1	3	RD / WH	3540	III	—
2	0.5	PK	5057	II	—	Seat Position Switch Low Reference	2	0.5	PK	5057	III	—
3	0.5	TN / WH	238	II	—	Driver Seat Belt Switch Signal	3	0.5	TN / WH	238	III	—
4	—	—	—	—	—	Not Occupied	4	—	—	—	—	—
5	0.5	TN / WH	2118	II	—	Driver Seat Belt Pretensioner High Control	5	0.5	TN / WH	2118	III	—
6	0.5	OG / BK	2119	II	—	Driver Seat Belt Pretensioner Low Control	6	0.5	OG / BK	2119	III	—
7 - 8	—	—	—	—	—	Not Occupied	7 - 8	—	—	—	—	—
9	3	BK	450	I	—	Ground	9	3	BK	450	III	—
10	0.5	YE / BK	2138	II	—	Left Front Seat Side Air Bag Low Control	10	0.5	YE / BK	2138	III	—

X307 Body Wiring Harness to Seat Wiring Harness - Driver (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.5	BN	2137	II	—	Left Front Seat Side Air Bag High Control	11	0.5	BN	2137	III	—
12 - 16	—	—	—	—	—	Not Occu-pied	12 - 16	—	—	—	—	—

X318 Instrument Panel Wiring Harness to Body Wiring Harness



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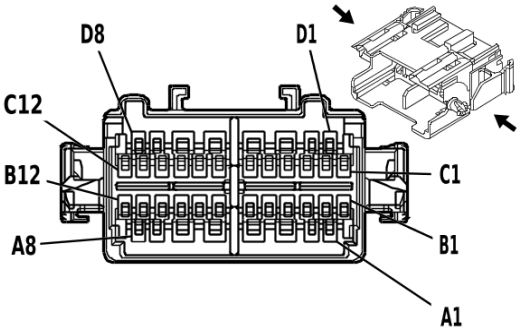


851471

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 15448130
Service Connector: 89046970
Description: 40-Way F 150, 280 GT Series(L-GY)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15416977
Service Connector: 19331377
Description: 40-Way M 150, 280 GT Series(L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575735	J-35616-14 (GN)	J-38125-215A
II	13575753	J-35616-4A (PU)	J-38125-215A
III	13575507	J-35616-5 (PU)	J-38125-215A
IV	19354111	J-35616-3 (GY)	J-38125-215A

X318 Instrument Panel Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.8	OG	1853	I	—	Right Front Midrange Speaker [+] Control	A1	0.8	OG	1853	IV	—
A2	0.8	D-GN	1953	I	—	Right Front Midrange Speaker [-] Control	A2	0.8	D-GN	1953	IV	—
A3	0.5	BK / WH	1751	II	—	Signal Ground	A3	0.5	BK / WH	1751	III	—
A4	0.5	TN / BK	371	II	—	Passenger Supplemental Inflatable Restraint Disable Switch Signal	A4	0.5	TN / BK	371	III	—
A5	0.5	BU / YE	6105	II	—	High Speed GMLAN Serial Data [+] 2	A5	0.5	D-BU / YE	6105	III	—
A6	0.5	WH	6106	II	—	High Speed GMLAN Serial Data [-] 2	A6	0.5	WH	6106	III	—
A7	—	—	—	—	—	Not Occupied	A7	—	—	—	—	—

X318 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A8	0.35	YE / BK	1181	I	—	Right Rear Door Open Switch Signal	A8	0.35	YE / BK	1181	IV	—
B1	0.8	L-BU	1320	I	—	Center High Mounted Stop Lamp Control 2	B1	0.8	L-BU	1320	IV	—
B2	—	—	—	—	—	Not Occupied	B2	—	—	—	—	—
B3	0.8	TN	1855	I	—	Right Rear Midrange Speaker [+] Control	B3	1	TN	1855	IV	—
B4	0.8	OG	1955	I	—	Right Rear Midrange Speaker [-] Control	B4	1	OG	1955	IV	—
B5	—	—	—	—	—	Not Occupied	B5	—	—	—	—	—
B6	0.5	GN	5060	I	—	Low Speed GMLAN Serial Data	B6	0.5	GN	5060	IV	—
B7	0.5	D-BU / WH	6619	I	—	Front Middle Impact Discriminating Sensor Low Reference	B7	0.5	D-BU / WH	6619	IV	—
B8	0.5	BN / WH	6618	I	—	Front Middle Impact Discriminating Sensor Signal	B8	0.5	BN / WH	6618	IV	—
B9	0.35	WH	3152	I	—	Lane Departure Warning Indicator Control	B9	0.5	WH	3152	IV	—
B1-0	0.35	D-GN	5060	I	—	Low Speed GMLAN Serial Data	B1-0	0.35	D-GN	5060	IV	—
B1-1	0.35	D-GN	6134	I	—	Body Control Module LIN Bus 3	B11	0.35	D-GN	6134	IV	—
B1-2	0.35	GY / WH	3153	I	—	Lane Departure Warning Disable Switch Signal	B1-2	0.5	GY / WH	3153	IV	—
C1	0.8	D-GN	654	I	—	Cellular Telephone Microphone Low Reference	C1	0.8	D-GN	654	IV	—
C2	0.35	PK	1139	I	—	Run/Crank Ignition 1 Voltage	C2	0.35	PK	1139	IV	—
C3	0.8	TN	1859	I	—	Left Rear Midrange Speaker [+] Control	C3	1	TN	1859	IV	—

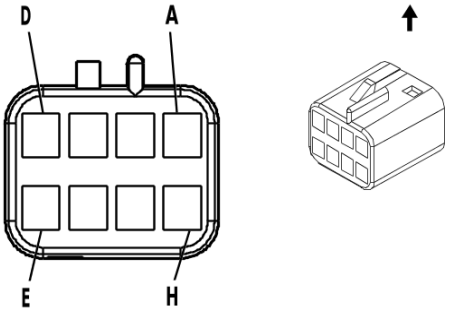
X318 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C4	0.8	WH	1959	I	—	Left Rear Midrange Speaker [-] Control	C4	1	WH	1959	IV	—
C5	0.8	GY	655	I	—	Cellular Telephone Microphone Signal	C5	0.8	GY	655	IV	—
C6	—	—	—	—	—	Not Occupied	C6	—	—	—	—	—
C7	0.35	L-GN	5926	I	—	Rear Body Opening Open Switch Signal	C7	0.35	L-GN	5926	IV	—
C8	0.35	PK / BK	1303	I	—	Liftgate Ajar Switch Signal 1	C8	0.35	PK / BK	1303	IV	—
C9	0.35	TN / WH	746	I	—	Right Front Door Ajar Switch Signal	C9	0.35	TN / WH	746	IV	—
C1-0	0.35	L-GN	1177	I	—	Right Front Door Open Switch Signal	C1-0	0.35	L-GN	1177	IV	—
C1-1	0.5	TN	126	I	—	Left Front Door Open Switch Signal	C1-1	0.35	TN	126	IV	—
C1-2	0.35	GY / BK	745	I	—	Left Front Door Ajar Switch Signal	C1-2	0.35	GY / BK	745	IV	—
D1	0.8	D-BU	1857	I	—	Left Front Midrange Speaker [+] Control	D1	0.8	D-BU	1857	IV	—
D2	0.8	L-BU	1957	I	—	Left Front Midrange Speaker [-] Control	D2	0.8	L-BU	1957	IV	—
D3	0.5 0.8	OG OG	1732 1732	II	— —	Control Module 12V Reference 3 Control Module 12V Reference 3	D3	0.8	OG	1732	III	—
D4	0.5	PK	353	II	—	Passenger Supplemental Inflatable Restraint Suppression Indicator Control	D4	0.5	PK	353	III	—
D5	0.5	PK / BK	780	II	—	Driver Door Lock Switch Lock Signal	D5	0.35	PK / BK	780	III	—
D6	0.5	OG / BK	781	II	—	Driver Door Lock Switch Unlock Signal	D6	0.35	OG / BK	781	III	—

X318 Instrument Panel Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
D7	0.35	L-BU	244	I	—	Passenger Door Lock Switch Lock Control	D7	0.35	L-BU	244	IV	—
D8	0.35	D-BU	245	I	—	Passenger Door Lock Switch Un-lock Control	D8	0.35	D-BU	245	IV	—

X319 Auxiliary Heater Front Wiring Harness to Body Wiring Harness



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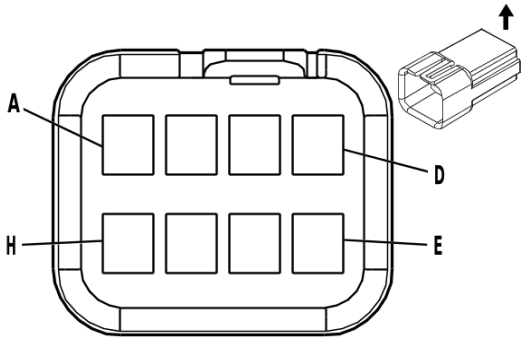


62434

Connector Part Information

Harness Type: Auxiliary Heater Front Wiring Harness
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12045688
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series(BK)

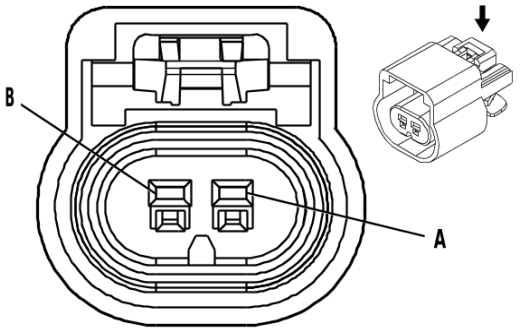
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X319 Auxiliary Heater Front Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	WH	1924	I	—	Auxiliary Blower Motor High Speed Control	A	0.35	WH	1924	II	—
B	0.35	OG	1925	I	—	Auxiliary Blower Motor Medium Speed Control 2	B	0.35	OG	1925	II	—
C	0.35	D-BU	1926	I	—	Auxiliary Blower Motor Low Speed Control 2	C	0.35	D-BU	1926	II	—
D	0.35	BN / WH	230	I	—	Instrument Panel Lamp Dimming Control	D	0.35	BN / WH	230	II	—
E	0.35	BK	450	I	—	Ground	E	0.35	BK	450	II	—
F - H	—	—	—	—	—	Not Occupied	F - H	—	—	—	—	—

X323 Airbag Wiring Harness to Body Wiring Harness



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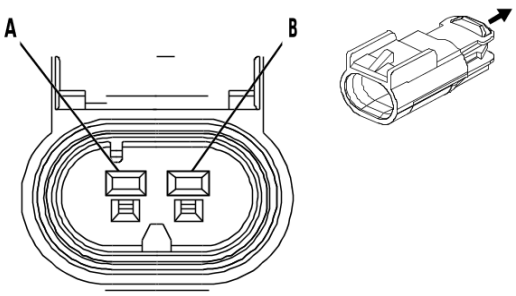


681875

Connector Part Information

Harness Type: Airbag Wiring Harness
OEM Connector: 13510085
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 GT Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13510099
Service Connector: 13580103
Description: 2-Way M 150 GT Series, Sealed(BK)

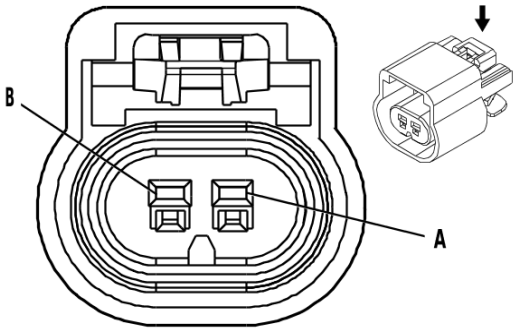
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X323 Airbag Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	GY / BK	6621	I	—	Left Middle Side Impact Sensor Low Reference	A	0.5	GY / BK	6621	II	—
B	0.5	D-GN / WH	6620	I	—	Left Middle Side Impact Sensor Signal	B	0.5	D-GN / WH	6620	II	—

X324 Airbag Wiring Harness to Body Wiring Harness



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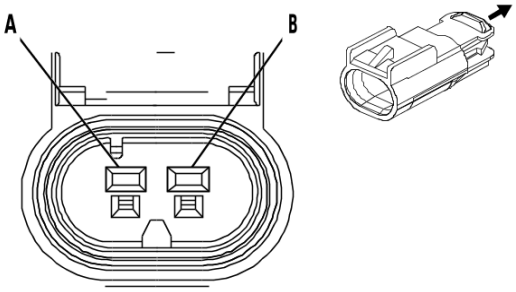


681875

Connector Part Information

Harness Type: Airbag Wiring Harness
OEM Connector: 13510085
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 GT Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13510099
Service Connector: 13580103
Description: 2-Way M 150 GT Series, Sealed(BK)

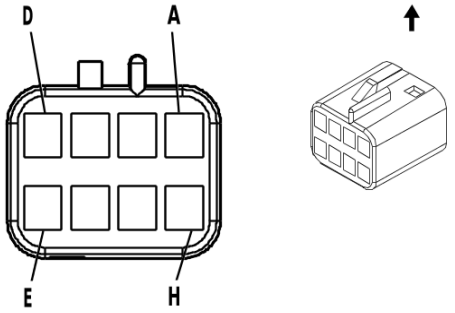
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X324 Airbag Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	L-GN / WH	6625	I	—	Right Middle Side Impact Sensor Low Reference	A	0.5	L-GN / WH	6625	II	—
B	0.5	L-BU / BK	6624	I	—	Right Middle Side Impact Sensor Signal	B	0.5	L-BU / BK	6624	II	—

X329 Instrument Panel Wiring Harness to Body Wiring Harness



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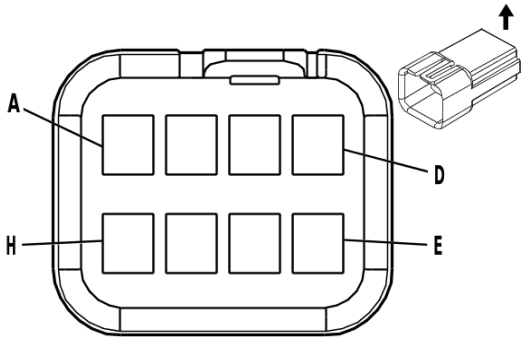


62434

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12089526
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series(BK)

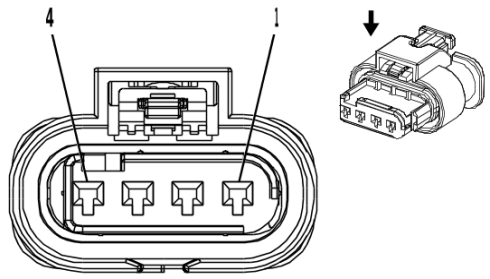
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X329 Instrument Panel Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A - C	—	—	—	—	—	Not Occupied	A - C	—	—	—	—	—
D	0.5	L-GN	24	I	—	Backup Lamp Control	D	0.5	L-GN	24	II	—
E	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage	E	0.5	PK	239	II	—
F	0.5	L-GN	24	I	—	Backup Lamp Control	F	0.5	L-GN	24	II	—
G - H	—	—	—	—	—	Not Occupied	G - H	—	—	—	—	—

X330 Instrument Panel Wiring Harness to Body Wiring Harness



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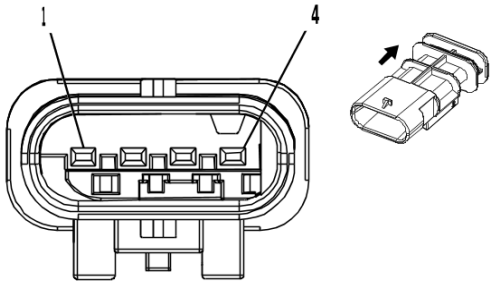


3225223

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13854531
Service Connector: 13586137
Description: 4-Way F 1.2 Series, Sealed(BK with YE Cover)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13854529
Service Connector: 19299698
Description: 4-Way M 1.2 Series, Sealed(YE)

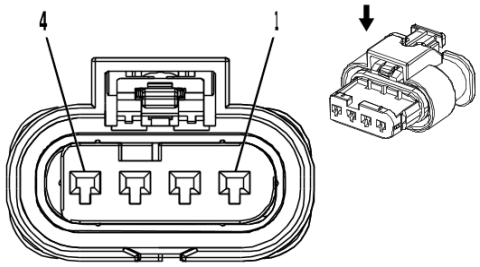
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

X330 Instrument Panel Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	TN	3021	I	—	Steering Wheel Air Bag Stage 1 High Control	1	0.5	TN	3021	II	—
2	0.5	BN	3020	I	—	Steering Wheel Air Bag Stage 1 Low Control	2	0.5	BN	3020	II	—
3 - 4	—	—	—	—	—	Not Occu-pied	3 - 4	—	—	—	—	—

X331 Instrument Panel Wiring Harness to Body Wiring Harness



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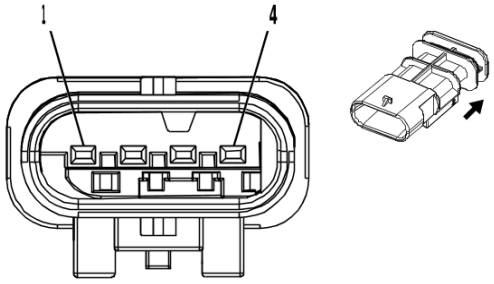


2684563

Connector Part Information

Harness Type: Instrument Panel Wiring Harness
OEM Connector: 13854532
Service Connector: 85571685
Description: 4-Way F 1.2 Series, Sealed(YE)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 13854530
Service Connector: 13586576
Description: 4-Way M 1.2 Series, Sealed(YE)

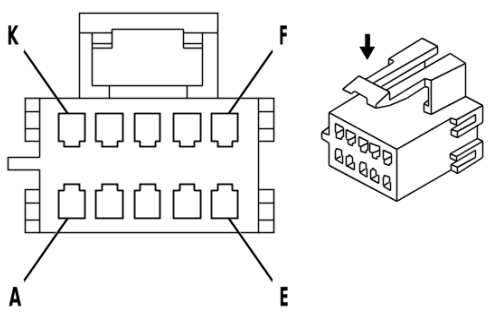
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-16 (L-GN)	No Tool Required
II	Not required	J-35616-17 (L-GN)	No Tool Required

X331 Instrument Panel Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	YE	3025	I	—	Passenger Instrument Panel Air Bag Stage 1 High Control	1	0.5	YE	3025	II	—
2	0.5	OG	3024	I	—	Passenger Instrument Panel Air Bag Stage 1 Low Control	2	0.5	OG	3024	II	—
3 - 4	—	—	—	—	—	Not Occu-pied	3 - 4	—	—	—	—	—

X400 Rear Door Door Wiring Harness to Body Wiring Harness



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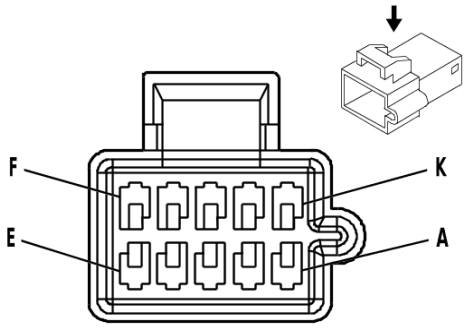


808703

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 15324054
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 150 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15324758
Service Connector: 19179279
Description: 10-Way M 150 Metri-Pack Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	13505668	J-35616-3 (GY)	J-38125-12A

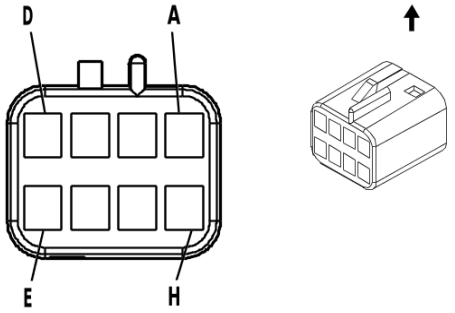
X400 Rear Door Door Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	TN	1855	I	—	Right Rear Midrange Speaker [+] Control	A	1	TN	1855	II	—
B	1	OG	1955	I	—	Right Rear Midrange Speaker [-] Control	B	1	OG	1955	II	—
C	—	—	—	—	—	Not Occupied	C	—	—	—	—	—
D	0.35	BK / WH	1051	I	—	Signal Ground	D	1	BK / WH	1051	II	—
E	0.35	D-BU	245	I	—	Passenger Door Lock Switch Unlock Control	E	0.35	D-BU	245	II	—
F	1	GY	295	I	—	Door Lock Actuator Lock Control	F	1	GY	295	II	—
G	1	TN / BK	1095	I	—	Right Rear Door Lock Actuator Unlock Control	G	1	TN / BK	1095	II	—
H	0.35	L-GN	5926	I	—	Rear Body Opening Open Switch Signal	H	0.35	L-GN	5926	II	—

X400 Rear Door Door Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
J	0.35	PK / BK	1303	I	—	Liftgate Ajar Switch Signal 1	J	0.35	PK / BK	1303	II	—
K	0.35	L-BU	244	I	—	Passenger Door Lock Switch Lock Control	K	0.35	L-BU	244	II	—

X403 Rear Door Door Wiring Harness to Body Wiring Harness (-Cutaway)



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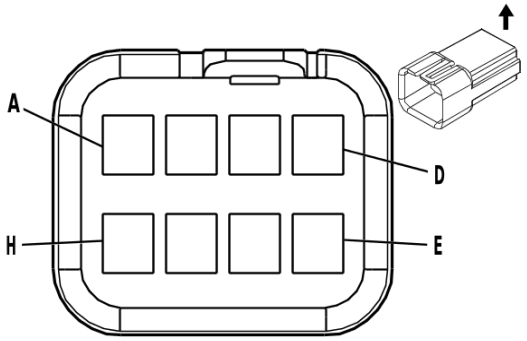


62434

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12089526
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series(BK)

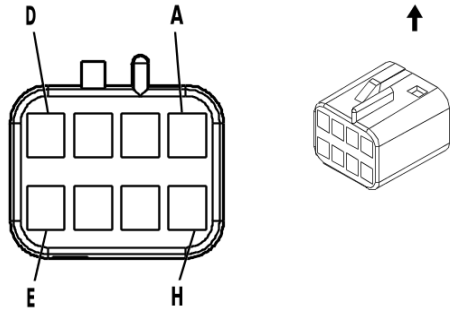
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X403 Rear Door Door Wiring Harness to Body Wiring Harness (-Cutaway)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	YE	7641	I	—	Frontview Camera 2 Signal [+]	A	0.5	D-BU	7641	II	—
B	0.5	L-BU	7642	I	—	Frontview Camera 2 Signal [-]	B	0.5	WH	7642	II	- UEU/ UFL
C	—	—	—	—	—	Not Occu-pied	C	—	—	—	—	—
D	0.5	BK	351	I	—	Signal Ground	D	0.35	BK / WH	351	II	—
E	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage	E	0.5	PK	239	II	—
F	0.5	L-GN	24	I	—	Backup Lamp Control	F	0.5	L-GN	24	II	—
G	—	—	—	—	—	Not Occu-pied	G	—	—	—	—	—
H	0.5	Bare	6799	I	—	Camera Shield Ground	H	0.5	Bare	6799	II	—

X403 Rear Door Door Wiring Harness to Body Wiring Harness (Cutaway)



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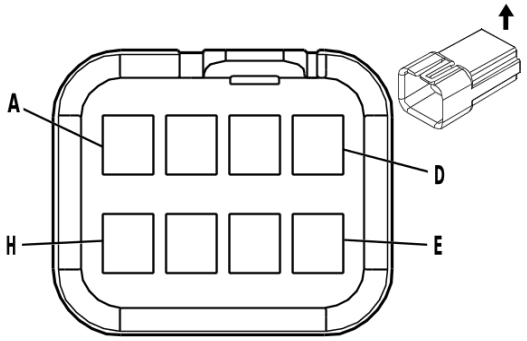


62434

Connector Part Information

Harness Type: Rearview Camera Wiring Harness
OEM Connector: 12047886
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12045688
Service Connector: 13584253
Description: 8-Way M 150 Metri-Pack Series(BK)

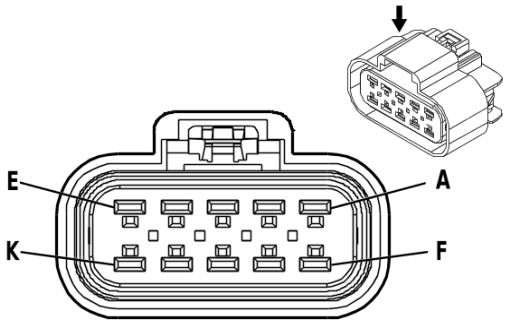
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X403 Rear Door Door Wiring Harness to Body Wiring Harness (Cutaway)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	WH	7641	I	—	Frontview Camera 2 Signal [+]	A	0.35	D-BU	7641	II	—
B	0.5	L-BU	7642	I	—	Frontview Camera 2 Signal [-]	B	0.35	L-BU	7642	II	—
C - D	—	—	—	—	—	Not Occu-pied	C - D	—	—	—	—	—
E	0.5	PK	239	I	—	Run/Crank Ignition 1 Voltage	E	0.5	PK	239	II	—
F	0.5	L-GN	24	I	—	Backup Lamp Control	F	0.5	L-GN	24	II	—
G	0.5	BK	351	I	—	Signal Ground	G	0.35	BK / WH	351	II	—
H	0.5	Bare	6799	I	—	Camera Shield Ground	H	0.35	BK	6799	II	—

X405 Chassis Wiring Harness to Chassis Wiring Harness (-Cutaway)



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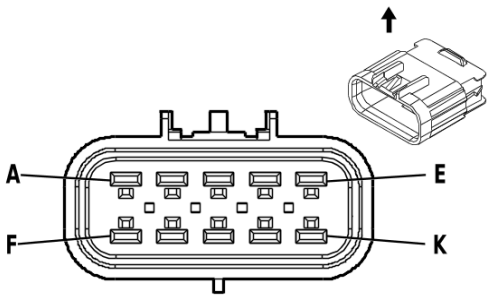


655819

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15326660
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15326661
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way M 280 GT Series, Sealed(BK)

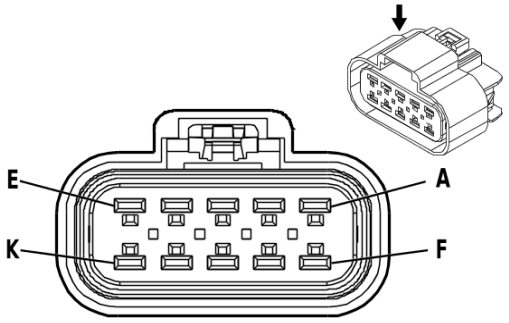
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X405 Chassis Wiring Harness to Chassis Wiring Harness (-Cutaway)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A - B	—	—	—	—	—	Not Occupied	A - B	—	—	—	—	—
C	0.8	BU	1320	I	—	Center High Mounted Stop Lamp Control 2	C	0.8	BU	1320	II	—
D	—	—	—	—	—	Left Rear Turn Signal Lamp Control	D	1	YE	618	II	—
E						Right Rear Turn Signal Lamp Control	E	1	GN	619	II	—
F	—	—	—	—	—	Trailer Park Lamp Control	F	1	BN	2109	II	—
G	0.8	BK	150	I	—	Ground Ground	G	3 1	BK BK	150 150	II II	LWN - LWN
H	—	—	—	—	—	Trailer Back-up Lamp Control	H	1	GN	1624	II	—
J	—	—	—	—	—	Not Occupied	J	—	—	—	—	—
K	—	—	—	—	—	Courtesy Lamp Control	K	0.8	D-BU / WH	149	II	—

X405 Chassis Rear Wiring Harness Extension Harness to Chassis Wiring Harness (Cutaway)



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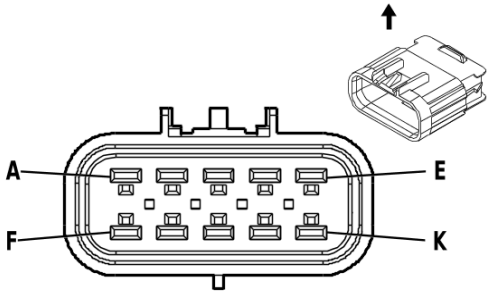


655819

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness

OEM Connector: 15326660

Service Connector: Service by Harness - See Part Catalog

Description: 10-Way F 280 GT Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Rear Wiring Harness Extension Harness

OEM Connector: 15326661

Service Connector: Service by Harness - See Part Catalog

Description: 10-Way M 280 GT Series, Sealed(BK)

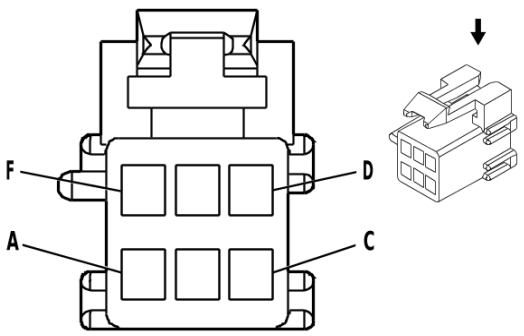
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X405 Chassis Rear Wiring Harness Extension Harness to Chassis Wiring Harness (Cutaway)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A - B	—	—	—	—	—	Not Occupied	A - B	—	—	—	—	—
C	1	L-BU	1320	I	—	Center High Mounted Stop Lamp Control 2	C	1	L-BU	1320	II	—
D	1	YE	618	I	—	Left Rear Turn Signal Lamp Control	D	1	YE	618	II	—
E	1	D-GN	619	I	—	Right Rear Turn Signal Lamp Control	E	1	D-GN	619	II	—
F	1	BN	2109	I	—	Trailer Park Lamp Control	F	1	BN	2109	II	—
G	1	D-BU	150	I	—	Ground	G	1	L-BU	150	II	—
H	1	WH	1624	I	—	Trailer Back-up Lamp Control	H	1	OG	1624	II	—
J	—	—	—	—	—	Not Occupied	J	—	—	—	—	—
K	0.8	D-BU / WH	149	I	—	Courtesy Lamp Control	K	0.8	D-BU / WH	149	II	—

X407 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness



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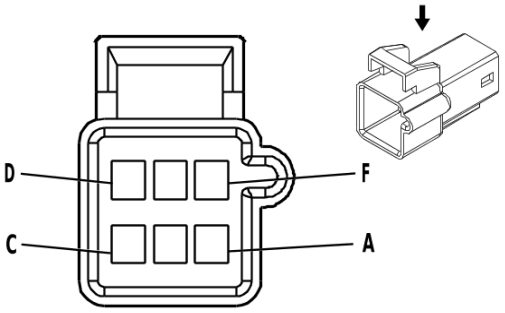


40425

Connector Part Information

Harness Type: Auxiliary Heater and Air Conditioning Wiring Harness
OEM Connector: 12064762
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 150 Metri-Pack Series(GY)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12064763
Service Connector: 12101876
Description: 6-Way M 150 Metri-Pack Series(GY)

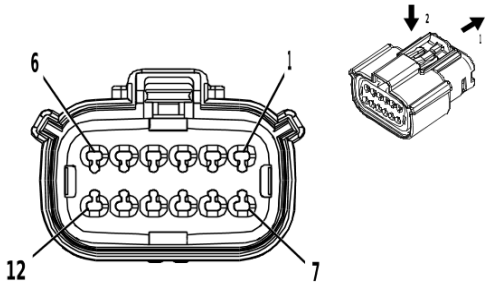
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X407 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.35	OG	2775	I	—	Rear Air Temperature Door Actuator Control	A	0.35	OG	2775	II	—
B	0.35	D-BU	1926	I	—	Auxiliary Blower Motor Low Speed Control 2	B	0.35	D-BU	1926	II	—
C	0.35	WH	1924	I	—	Auxiliary Blower Motor High Speed Control	C	0.35	WH	1924	II	—
D	0.35	OG	1925	I	—	Auxiliary Blower Motor Medium Speed Control 2	D	0.35	OG	1925	II	—
E	0.35	BN	341	I	—	Run Ignition 3 Voltage	E	0.35	BN	341	II	—
F	0.35	GY	2599	I	—	Rear Mode Door Actuator Signal	F	0.35	GY	2599	II	—

X408 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness



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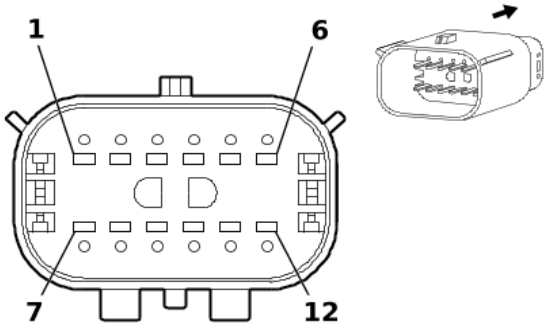


1825167

Connector Part Information

Harness Type: Rear Object Alarm Sensor Wiring Harness
OEM Connector: 13653762
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F 1.5 MX Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 33369138
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 1.5 MX Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

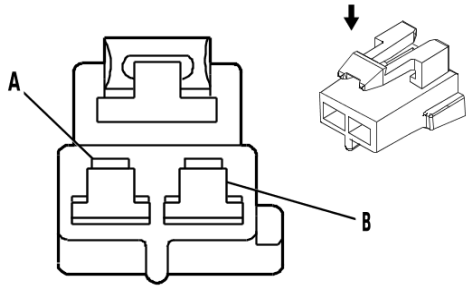
X408 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	YE / WH	2377	I	—	Right Rear Middle Parking Assist Sensor Signal	1	0.5	YE / WH	2377	II	—
2	0.5	YE / VT	2378	I	—	Right Rear Outer Parking Assist Sensor Signal	2	0.5	YE / VT	2378	II	—
3	0.5	BK / GY	2379	I	—	Object Sensor Low Reference	3	0.5	BK / GY	2379	II	—
4	0.5	D-BU	2374	I	—	Object Sensor Voltage Reference	4	0.5	BN / WH	2374	II	—
5	0.5	YE	2375	I	—	Left Rear Outer Parking Assist Sensor Signal	5	0.5	YE	2375	II	—
6	0.5	YE / D-BU	2376	I	—	Left Rear Middle Parking Assist Sensor Signal	6	0.5	YE / D-BU	2376	II	—
7	0.5	BK	2150	I	—	Ground	7	1	BK	2150	II	—

X408 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.5	L-GN	5060	I	—	Low Speed GMLAN Serial Data	8	0.5	L-GN	5060	II	—
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	0.5	GY / YE	5853	I	—	Driver Side Side Object Detection LED Signal 1	10	0.5	GY / YE	5853	II	—
11	0.5	GY	5861	I	—	Passenger Side Object Detection LED Signal 1	11	0.5	GY	5861	II	—
12	0.5	RD / L-GN	3140	I	—	Battery Positive Voltage	12	0.5	RD / L-GN	3140	II	—

X409 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness



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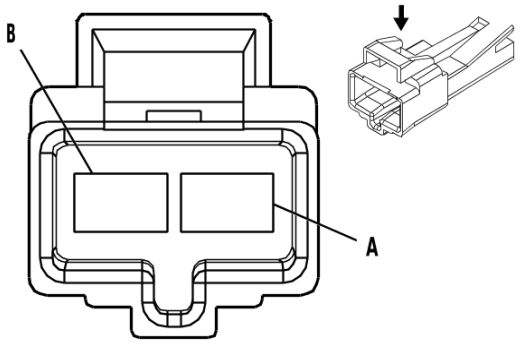


38284

Connector Part Information

Harness Type: Auxiliary Heater and Air Conditioning Wiring Harness
OEM Connector: 12064749
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 480 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12064750
Service Connector: 19368865
Description: 2-Way M 480 Metri-Pack Series(BK)

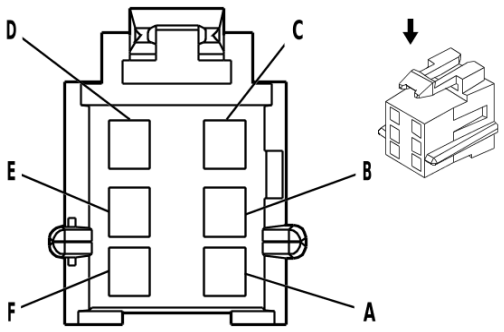
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-40 (BU)	No Tool Required
II	Not required	J-35616-41 (BU)	No Tool Required

X409 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	5	RD / WH	1740	I	—	Battery Positive Voltage	A	5	RD / WH	1740	II	—
B	5	BK	850	I	—	Ground Ground	B	5 5	BK BK	850 450	II	— —

X410 Tail Lamp Wiring Harness to Body Wiring Harness



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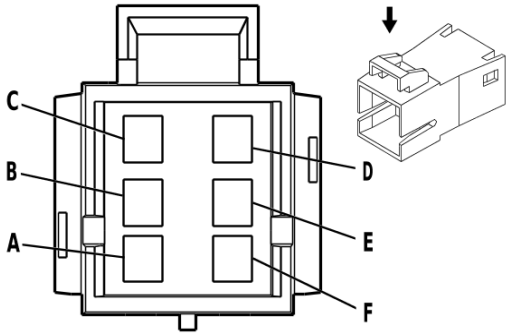


39689

Connector Part Information

Harness Type: Tail Lamp Wiring Harness
OEM Connector: 12064752
Service Connector: 19368739
Description: 6-Way F 280 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12064754
Service Connector: 19368739
Description: 6-Way M 280 Metri-Pack Series(BK)

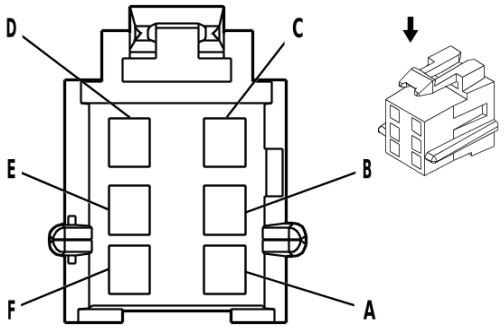
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
I	Not required	No Tool Required	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X410 Tail Lamp Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	BN	2509	I	—	Left Rear Park Lamp Control	A	0.5	BN	2509	II	—
B	1	YE	618	I	—	Left Rear Turn Signal Lamp Control	B	1	YE	618	II	—
C	—	—	—	—	—	Not Occu-pied	C	—	—	—	—	—
D	0.8	BK	850	I	—	Ground	D	0.8	BK	850	II	—
E	—	—	—	—	—	Not Occu-pied	E	—	—	—	—	—
F	0.8	L-GN	24	I	—	Backup Lamp Control	F	0.8	L-GN	24	II	—

X411 Rear Door Door Wiring Harness - Left to Body Wiring Harness



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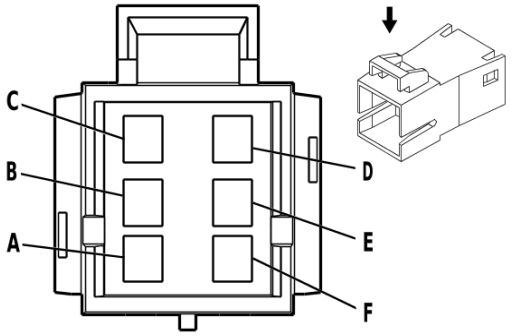


39689

Connector Part Information

Harness Type: Rear Door Door Wiring Harness - Left
OEM Connector: 12064752
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 280 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12064754
Service Connector: 19368739
Description: 6-Way M 280 Metri-Pack Series(BK)

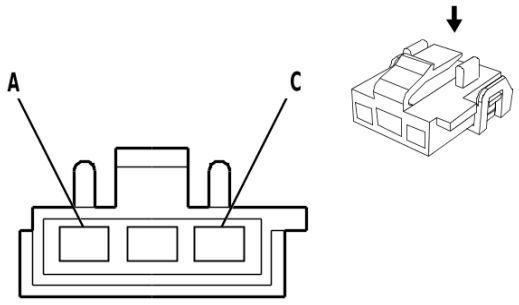
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-4A (PU)	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X411 Rear Door Door Wiring Harness - Left to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	TN	1859	I	—	Left Rear Midrange Speaker [+] Control	A	1	TN	1859	II	—
B	1	WH	1959	I	—	Left Rear Midrange Speaker [-] Control	B	1	WH	1959	II	—
C	—	—	—	—	—	Not Occupied	C	—	—	—	—	—
D	5	PU	293	I	—	Rear Defogger Grid Control	D	5	PU	293	II	—
E	3	BK	850	I	—	Ground	E	3	BK	850	II	—
F	—	—	—	—	—	Not Occupied	F	—	—	—	—	—

X412 Rear Door Door Wiring Harness to Body Wiring Harness



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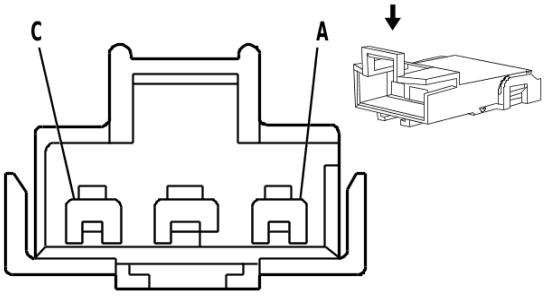


1884161

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 12020014
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F Weather Pack Series, Sealed(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12045681
Service Connector: 19368884
Description: 3-Way M 280, 480 Metri-Pack Series(BK)

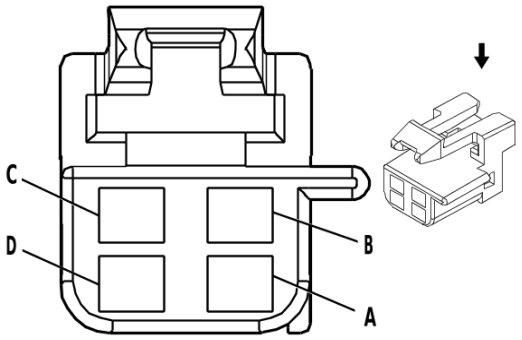
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-40 (BU)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	J-35616-41 (BU)	No Tool Required
IV	Not required	J-35616-5 (PU)	No Tool Required

X412 Rear Door Door Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	BN	2509	II	—	Left Rear Park Lamp Control	A	0.5	BN	2509	IV	—
B	5	PU	293	I	—	Rear Defogger Grid Control	B	5	PU	293	III	—
C	0.5 3	BK BK	1050 1050	II	— —	Ground Ground	C	3	BK	1050	IV	—

X415 Radio Rear Speaker Wiring Harness to Body Wiring Harness



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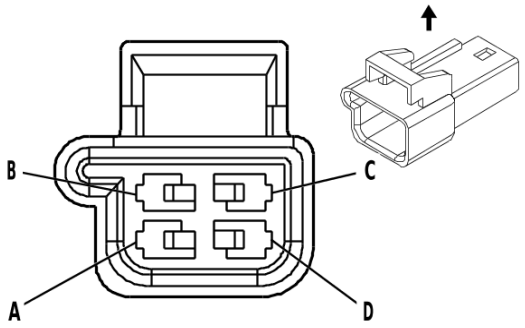


40399

Connector Part Information

Harness Type: Radio Rear Speaker Wiring Harness
OEM Connector: 12064760
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12065658
Service Connector: 19368719
Description: 4-Way M 150 Metri-Pack Series(BK)

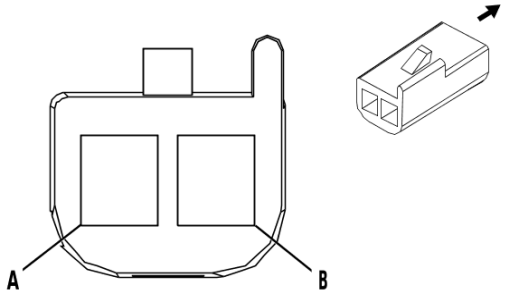
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X415 Radio Rear Speaker Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	1	WH	1959	I	—	Left Rear Midrange Speaker [-] Control	A	1	WH	1959	II	—
B	1	TN	1859	I	—	Left Rear Midrange Speaker [+] Control	B	1	TN	1859	II	—
C	1	OG	1955	I	—	Right Rear Midrange Speaker [-] Control	C	1	OG	1955	II	—
D	1	TN	1855	I	—	Right Rear Midrange Speaker [+] Control	D	1	TN	1855	II	—

X419 Center High Mounted Stop Lamp Jumper Wiring Harness to Body Wiring Harness



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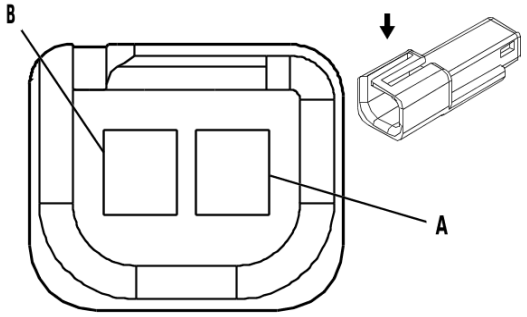


1664595

Connector Part Information

Harness Type: Center High Mounted Stop Lamp Jumper Wiring Harness
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12048457
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series(BK)

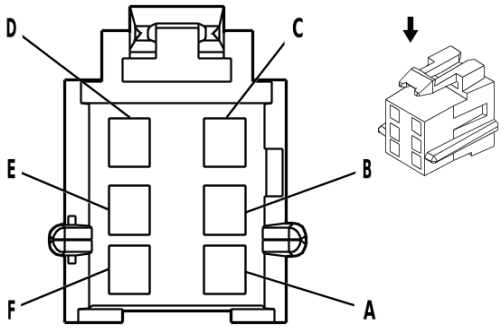
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X419 Center High Mounted Stop Lamp Jumper Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.8	L-BU	1320	I	—	Center High Mounted Stop Lamp Control 2	A	0.8	L-BU	1320	II	—
B	0.8	BK	850	I	—	Ground	B	0.8	BK	850	II	—

X420 Tail Lamp Wiring Harness to Body Wiring Harness



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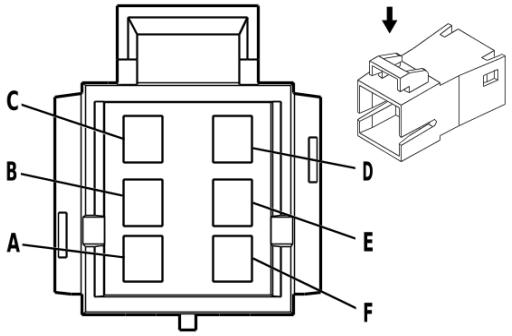


39689

Connector Part Information

Harness Type: Tail Lamp Wiring Harness
OEM Connector: 12064752
Service Connector: 19368739
Description: 6-Way F 280 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 12064754
Service Connector: 19368739
Description: 6-Way M 280 Metri-Pack Series(BK)

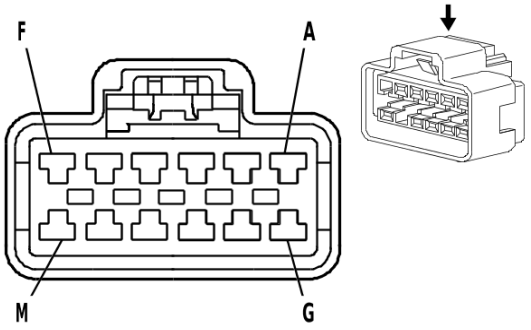
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	J-35616-5 (PU)	No Tool Required

X420 Tail Lamp Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	BN	2609	I	—	Right Rear Park Lamp Control	A	0.5	BN	2609	II	—
B	1	D-GN	619	I	—	Right Rear Turn Signal Lamp Control	B	1	D-GN	619	II	—
C	—	—	—	—	—	Not Occu-pied	C	—	—	—	—	—
D	0.8	BK	1050	I	—	Ground	D	0.8	BK	1050	II	—
E	—	—	—	—	—	Not Occu-pied	E	—	—	—	—	—
F	0.8	L-GN	24	I	—	Backup Lamp Control	F	0.8	L-GN	24	II	—

X421 Roof Console Wiring Harness to Body Wiring Harness



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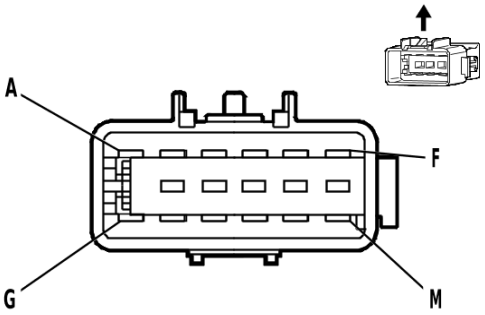


847281

Connector Part Information

Harness Type: Roof Console Wiring Harness
OEM Connector: 15326110
Service Connector: 15326110
Description: 12-Way F 280 GT Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15326942
Service Connector: 15326942
Description: 12-Way M 280 GT Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575753	J-35616-4A (PU)	J-38125-215A
I	13575753	J-35616-4A (PU)	J-38125-215A
II	13575507	J-35616-5 (PU)	J-38125-215A

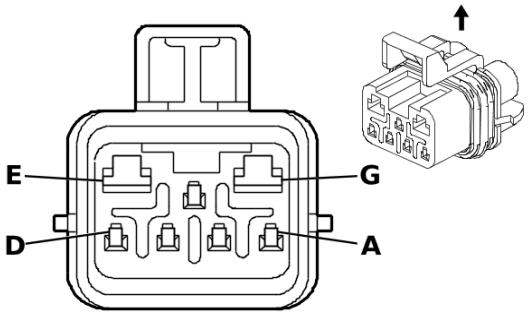
X421 Roof Console Wiring Harness to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.8	D-BU / WH	149	I	—	Courtesy Lamp Control	A	0.8	D-BU / WH	149	II	—
B	0.8	D-BU / WH	149	I	—	Courtesy Lamp Control	B	0.8	D-BU / WH	149	II	—
C	0.35	BN / WH	230	I	—	Instrument Panel Lamp Dimming Control	C	0.35	BN / WH	230	II	—
D	0.5	WH	1924	I	—	Auxiliary Blower Motor High Speed Control	D	0.5	WH	1924	II	—
E	0.5	OG	1925	I	—	Auxiliary Blower Motor Medium Speed Control 2	E	0.5	OG	1925	II	—
F	0.5	D-BU	1926	I	—	Auxiliary Blower Motor Low Speed Control 2	F	0.5	D-BU	1926	II	—
G	0.35	BN	341	I	—	Run Ignition 3 Voltage	G	0.35	BN	341	II	—
H	0.8	BK	1050	I	—	Ground	H	0.8	BK	1050	II	—

X421 Roof Console Wiring Harness to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
J	0.8	OG	1732	I	—	Control Module 12V Reference 3	J	0.8	OG	1732	II	—
K	0.5	BN	5263	I	—	Auxiliary HVAC Rear Temperature Signal	K	0.5	BN	5263	II	—
L	0.5	PU / WH	5264	I	—	Auxiliary HVAC Rear Mode Signal	L	0.5	PU / WH	5264	II	—
M	0.5	PK / BK	5265	I	—	Auxiliary HVAC Rear Control Signal	M	0.5	PK / BK	5265	II	—

X450 Trailer Jumper Wiring Harness to Chassis Wiring Harness (NE7)



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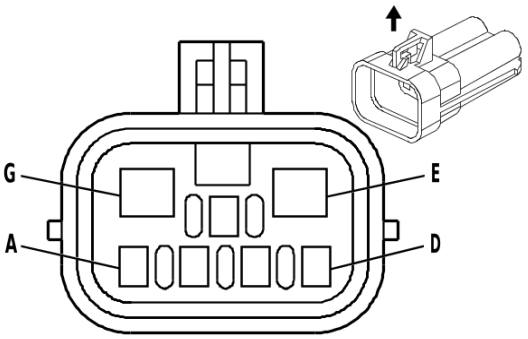


1372292

Connector Part Information

Harness Type: Trailer Jumper Wiring Harness
OEM Connector: 12059472
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 150 Metri-Pack, 480 Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 12052200
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way M 150, 480 Metri-Pack Series, Sealed(BK)

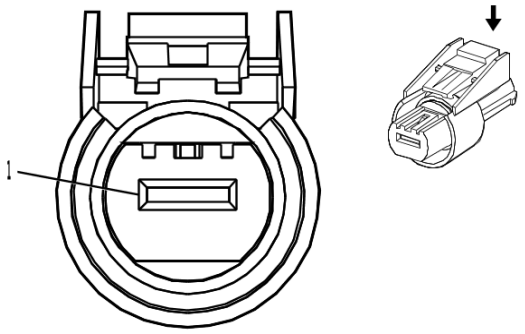
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required
III	Not required	J-35616-41 (BU)	No Tool Required

X450 Trailer Jumper Wiring Harness to Chassis Wiring Harness (NE7)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	—	L-GN	1624	I	—	Trailer Back-up Lamp Control	A	1	L-GN	1624	II	—
B	—	BN	2109	I	—	Trailer Park Lamp Control	B	1	BN	2109	II	—
C	—	YE	1618	I	—	Left Rear Trailer Stop/ Turn Lamp Control	C	1	YE	1618	II	—
D	—	—	—	—	—	Not Occu-pied	D	—	—	—	—	—
E	—	D-BU	47	I	—	Trailer Auxili-ary Control	E	3	D-BU	47	III	—
F	—	D-GN	1619	I	—	Right Rear Trailer Stop/ Turn Lamp Control	F	1	D-GN	1619	II	—
G	—	RD / BK	742	I	—	Battery Posi-tive Voltage	G	3	RD / BK	742	III	—

X460 Chassis Wiring Harness to Chassis Wiring Harness



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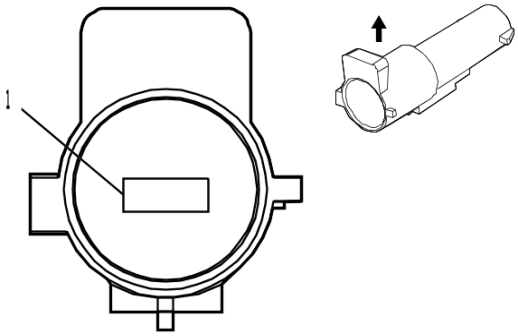


814660

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15326120
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 800 Metri-Pack Series, Sealed(BK)

Connector Part Information

Harness Type: Chassis Wiring Harness
OEM Connector: 15326119
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way M 800 Metri-Pack Series, Sealed(BK)

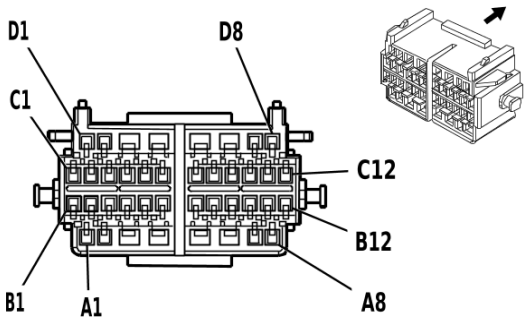
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-44 (YE)	No Tool Required
II	Not required	J-35616-45 (YE)	No Tool Required

X460 Chassis Wiring Harness to Chassis Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	8	WH	22	I	—	Trailer Ground	1	8	WH	22	II	—

X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness



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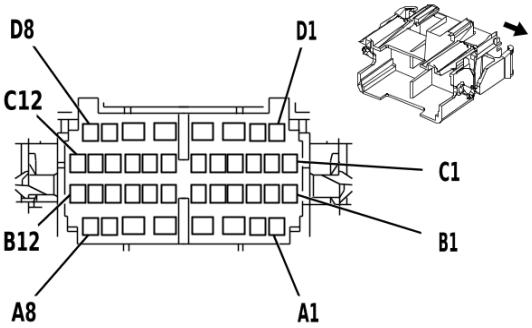


1715230

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 15448129
Service Connector: Service by Harness - See Part Catalog
Description: 40-Way F 150, 280 GT Series(BK)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15416976
Service Connector: 89047197
Description: 40-Way M 150, 280 GT Series, Sealed(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	No Tool Required	No Tool Required
IV	13575508	J-35616-5 (PU)	J-38125-215A
V	19354111	J-35616-3 (GY)	J-38125-215A
VI	Not required	No Tool Required	No Tool Required

X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.35	TN	126	I	—	Left Front Door Open Switch Signal	A1	0.35	TN	126	V	—
A2 - A4	—	—	—	—	—	Not Occupied	A2 - A4	—	—	—	—	—
A5	0.35 3	BK BK	450 450	II II	(AU3) - (DE5) - (A31) (AU3) + (DE5/ A31)	Ground Ground	A5	3	BK	450	IV	—
A6	0.35	BN / WH	230	II	—	Instrument Panel Lamp Dimming Control	A6	0.35	BN / WH	230	IV	—
A7	0.8	OG	2267	I	—	Outside Rearview Mirror Heater Control	A7	0.8	OG	2267	V	—

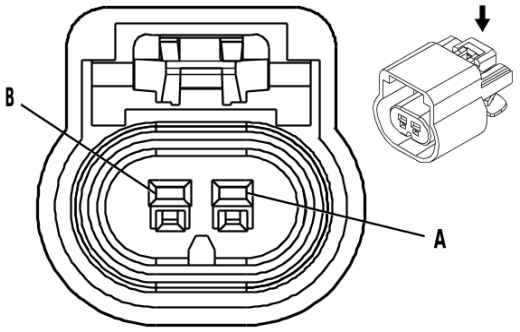
X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A8	0.35	PU / WH	889	I	—	Right Outside Rearview Mirror Motor Down Control	A8	0.5	PU / WH	889	V	—
B1	0.35	OG / BK	781	I	—	Driver Door Lock Switch Unlock Signal	B1	0.35	OG / BK	781	V	—
B2	0.35	PK / BK	780	I	—	Driver Door Lock Switch Lock Signal	B2	0.35	PK / BK	780	V	—
B3	0.35	GY / BK	745	I	—	Left Front Door Ajar Switch Signal	B3	0.35	GY / BK	745	V	—
B4	0.35	BK	450	I	—	Ground	B4	0.35	BK	450	V	—
B5 - B6	—	—	—	—	—	Not Occupied	B5 - B6	—	—	—	—	—
B7	0.8	TN	694	I	—	Driver Door Lock Actuator Unlock Control	B7	0.8	TN	694	V	—
B8	0.8	GY	295	I	—	Door Lock Actuator Lock Control	B8	0.8	GY	295	V	—
B9 - B1-1	—	—	—	—	—	Not Occupied	B9 - B11	—	—	—	—	—
B1-2	0.8	D-BU	1857	I	—	Left Front Midrange Speaker [+] Control	B1-2	0.8	D-BU	1857	V	—
C1	0.5	PU / WH	6628	I	—	Left Front Side Impact Sensor Low Reference	C1	0.5	PU / WH	6628	V	—
C2	0.5	WH	2132	I	—	Left Front Side Impact Sensor Signal	C2	0.5	WH	2132	V	—
C3 - C6	—	—	—	—	—	Not Occupied	C3 - C6	—	—	—	—	—
C7	0.5 0.5	GY / YE L-BU / WH	5853 1314	III I	UFT - UFT	Driver Side Side Object Detection LED Signal 1 Left Front Turn Signal Lamp Control	C7	0.5 0.5	GY / YE L-BU / WH	5853 1314	VI V	UFT - UFT
C8	0.5	RD / WH	4340	I	—	Battery Positive Voltage	C8	0.5	RD / WH	4340	V	—
C9 - C1-1	—	—	—	—	—	Not Occupied	C9 - C1-1	—	—	—	—	—

X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C1-2	0.8	L-BU	1957	I	—	Left Front Midrange Speaker [-] Control	C1-2	0.8	L-BU	1957	V	—
D1-D3	—	—	—	—	—	Not Occupied	D1-D3	—	—	—	—	—
D4	3	TN	167	II	—	Right Front Window Down Switch Main Control Signal	D4	3	TN	167	IV	—
D5	3	L-BU	166	II	—	Right Front Window Up Switch Main Control Signal	D5	3	L-BU	166	IV	—
D6	3	D-GN	1001	II	—	Retained Accessory Power Ignition Voltage	D6	3	D-GN	1001	IV	—
D7	0.35	BN / WH	1498	I	—	Right Outside Rearview Mirror Motor Up Control	D7	0.5	BN / WH	1498	V	—
D8	0.35	OG / WH	881	I	—	Right Outside Rearview Mirror Motor Right Control	D8	0.5	OG / WH	881	V	—

X501 Airbag Wiring Harness to Front Side Door Door Wiring Harness - Driver



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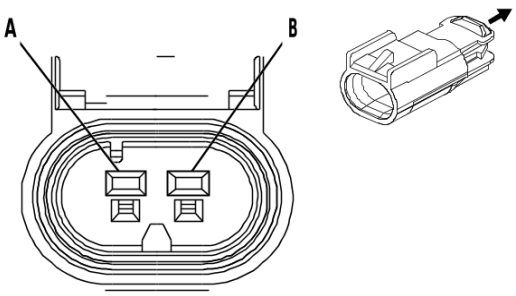


681875

Connector Part Information

Harness Type: Airbag Wiring Harness
OEM Connector: 13510085
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 GT Series, Sealed(BK)

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Driver
OEM Connector: 13510099
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 150 GT Series, Sealed(BK)

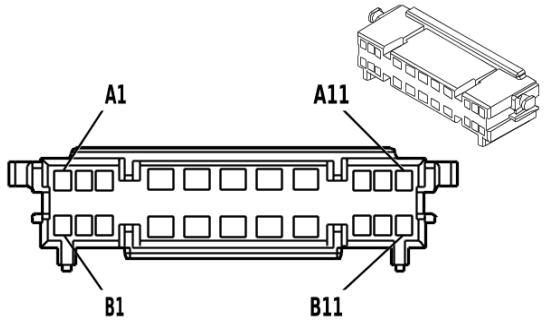
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-2A (GY)	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

X501 Airbag Wiring Harness to Front Side Door Door Wiring Harness - Driver

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	PU / WH	6628	I	—	Left Front Side Impact Sensor Low Reference	A	0.5	PU / WH	6628	II	—
B	0.5	WH	2132	I	—	Left Front Side Impact Sensor Signal	B	0.5	WH	2132	II	—

X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness



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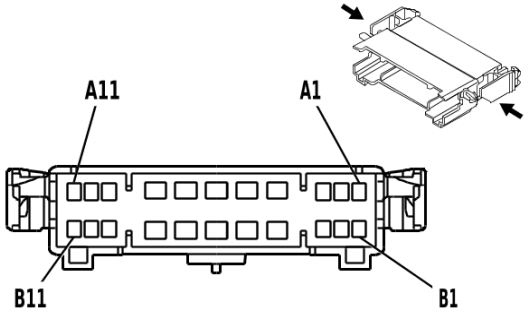


524211

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger
OEM Connector: 15326063
Service Connector: Service by Harness - See Part Catalog
Description: 22-Way F 150, 280 GT Series, Sealed(GY)

Connector Part Information

Harness Type: Body Wiring Harness
OEM Connector: 15326064
Service Connector: 15326064
Description: 22-Way M 150, 280 GT Series, Sealed(GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-14 (GN)	No Tool Required
II	Not required	J-35616-4A (PU)	No Tool Required
III	Not required	No Tool Required	No Tool Required
IV	13575508	J-35616-5 (PU)	J-38125-215A
V	19354111	J-35616-3 (GY)	J-38125-215A
VI	Not required	No Tool Required	No Tool Required

X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A1	0.8	OG	1853	I	—	Right Front Midrange Speaker [+] Control	A1	0.8	OG	1853	V	—
A2	0.8	TN	294	I	—	Door Lock Actuator Un-lock Control	A2	0.8	TN	294	V	—
A3	0.8	OG	2267	I	—	Outside Rearview Mirror Heater Control	A3	0.8	OG	2267	V	—
A4	3	L-BU	166	II	—	Right Front Window Up Switch Main Control Sig-nal	A4	3	L-BU	166	IV	—
A5	0.35 0.8	BK BK	1850 1850	II II	(AU3) - (A31) - (DE5) (AU3) + (DE5/ A31)	Ground Ground	A5	0.8	BK	1850	IV	—

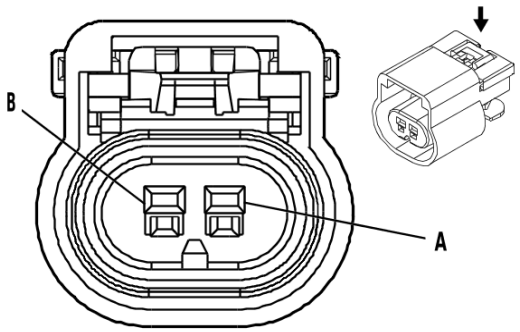
X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A6	0.35	BN / WH	1498	II	—	Right Outside Rearview Mirror Motor Up Control	A6	0.5	BN / WH	1498	IV	—
A7	0.35	OG / WH	881	II	—	Right Outside Rearview Mirror Motor Right Control	A7	0.5	OG / WH	881	IV	—
A8	0.35	TN / WH	746	II	—	Right Front Door Ajar Switch Signal	A8	0.35	TN / WH	746	IV	—
A9	0.35	BK	1850	I	—	Ground	A9	0.35	BK	1850	V	—
A1-0	0.5	D-GN	2134	I	—	Right Front Side Impact Sensor Signal	A1-0	0.5	D-GN	2134	V	—
A1-1	0.35	L-BU	244	I	—	Passenger Door Lock Switch Lock Control	A11	0.35	L-BU	244	V	—
B1	0.8	D-GN	1953	I	—	Right Front Midrange Speaker [-] Control	B1	0.8	D-GN	1953	V	—
B2	0.8	GY	295	I	—	Door Lock Actuator Lock Control	B2	0.8	GY	295	V	—
B3	0.5 0.5	GY D-BU / WH	5861 1315	III I	UFT - UFT	Passenger Side Object Detection LED Signal 1 Right Front Turn Signal Lamp Control	B3	0.5 0.5	GY D-BU / WH	5861 1315	VI V	UFT - UFT
B4	3	TN	167	II	—	Right Front Window Down Switch Main Control Signal	B4	3	TN	167	IV	—
B5	3	D-GN	1001	II	—	Retained Accessory Power Ignition Voltage	B5	3	D-GN	1001	IV	—
B6	0.35	BN / WH	230	II	—	Instrument Panel Lamp Dimming Control	B6	0.35	BN / WH	230	IV	—
B7	0.35	PU / WH	889	II	—	Right Outside Rearview Mirror Motor Down Control	B7	0.5	PU / WH	889	IV	—
B8	0.35	L-GN	1177	II	—	Right Front Door Open Switch Signal	B8	0.35	L-GN	1177	IV	—
B9	—	—	—	—	—	Not Occupied	B9	—	—	—	—	—

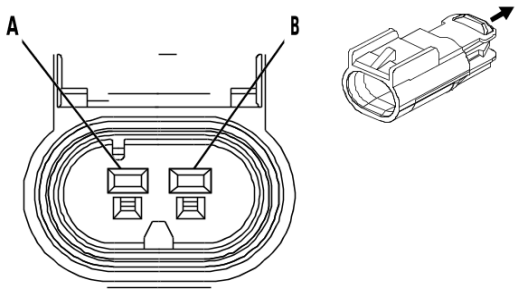
X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness (cont'd)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
B1-0	0.5	WH / BK	6629	I	—	Right Front Side Impact Sensor Low Reference	B1-0	0.5	WH / BK	6629	V	—
B1-1	0.35	D-BU	245	I	—	Passenger Door Lock Switch Unlock Control	B11	0.35	D-BU	245	V	—

X601 Side Impact Sensor - Right Front Jumper Wiring Harness to Front Side Door Door Wiring Harness - Passenger



632351



681875

Connector Part Information

Harness Type: Side Impact Sensor - Right Front Jumper Wiring Harness

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way F

Connector Part Information

Harness Type: Front Side Door Door Wiring Harness - Passenger

OEM Connector: 13510099

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way M 150 GT Series, Sealed(BK)

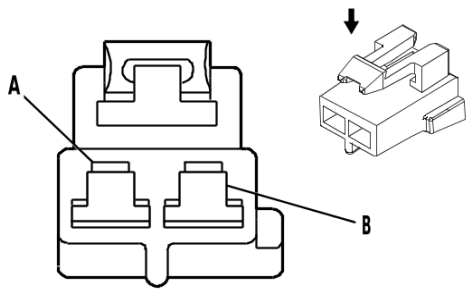
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	No Tool Required	No Tool Required
II	Not required	J-35616-3 (GY)	No Tool Required

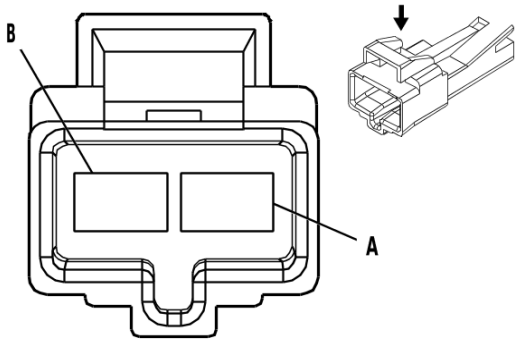
X601 Side Impact Sensor - Right Front Jumper Wiring Harness to Front Side Door Door Wiring Harness - Passenger

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	WH / BK	6629	I	—	Right Front Side Impact Sensor Low Reference	A	0.5	WH / BK	6629	II	—
B	0.5	D-GN	2134	I	—	Right Front Side Impact Sensor Signal	B	0.5	D-GN	2134	II	—

X901 Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness - Left



808706



38284

Connector Part Information

Harness Type: Rear Window Defogger Wiring Harness
OEM Connector: 12064749
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 480 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Rear Door Door Wiring Harness - Left
OEM Connector: 12064750
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 480 Metri-Pack Series(BK)

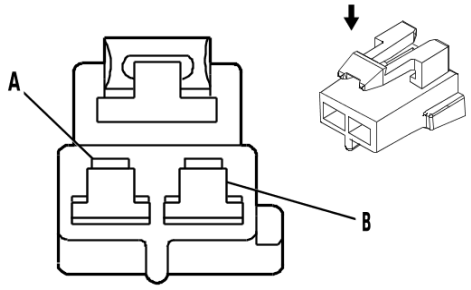
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-40 (BU)	No Tool Required
II	Not required	J-35616-40 (BU)	No Tool Required
III	Not required	J-35616-41 (BU)	No Tool Required

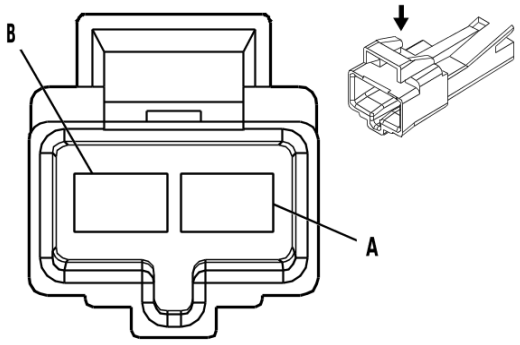
X901 Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness - Left

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	5	PU	293	I	—	Rear Defogger Grid Control	A	5	PU	293	III	—
B	3	BK	850	I	—	Ground	B	3	BK	850	II	—

X902 Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness



808706



38284

Connector Part Information

Harness Type: Rear Window Defogger Wiring Harness
OEM Connector: 12064749
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 480 Metri-Pack Series(BK)

Connector Part Information

Harness Type: Rear Door Door Wiring Harness
OEM Connector: 12064750
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 480 Metri-Pack Series(BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not required	J-35616-40 (BU)	No Tool Required
II	Not required	J-35616-40 (BU)	No Tool Required
III	Not required	J-35616-41 (BU)	No Tool Required

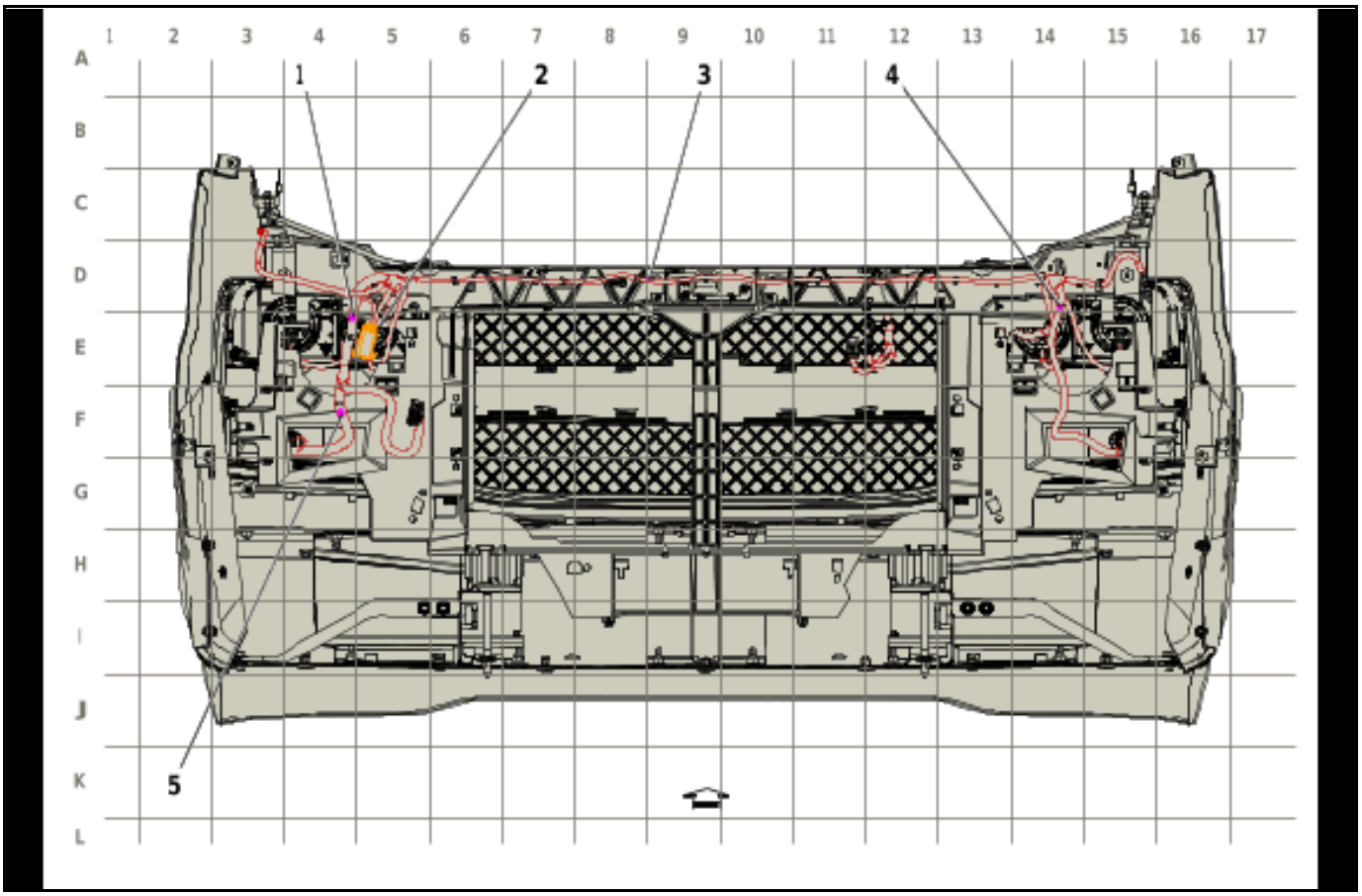
X902 Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	5	PU	293	I	—	Rear Defogger Grid Control	A	5	PU	293	III	—
B	3	BK	1050	I	—	Ground	B	3	BK	1050	II	—

Electrical Component Locator and Harness Routing Views

Schematic and Routing Diagrams

Harness Routing Views (Forward Lamp Harness Routing)



6040694

Items

(1) J100 Forward Lamp Wiring Harness

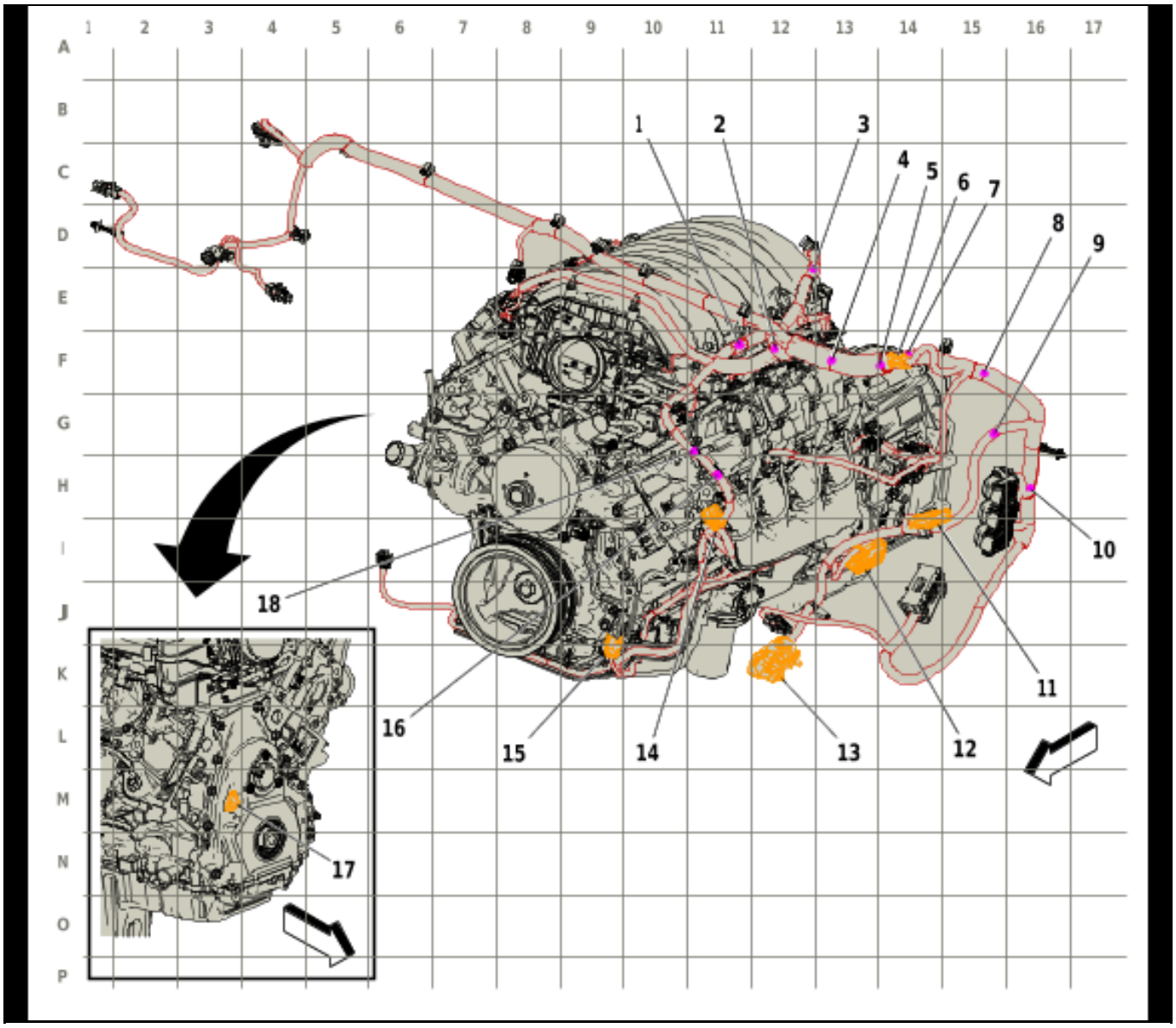
(2) X150 Instrument Panel Wiring Harness to Forward Lamp Wiring Harness

(3) J122 Forward Lamp Wiring Harness

(4) J110 Forward Lamp Wiring Harness

(5) J121 Forward Lamp Wiring Harness

Harness Routing Views (Engine Harness Routing - Front (L8T))



6040695

Items

(1) J101 Engine Wiring Harness

(2) J111 Engine Wiring Harness (L8T)

(3) J181 Ignition Coil Jumper Wiring Harness (L8T)

(4) J182 Left Ignition Coil Wiring Harness

(5) J115 Engine Wiring Harness

(6) X109 Engine Wiring Harness to Underhood Lamp Wiring Harness (TR9)

(7) J102 Engine Wiring Harness

(8) J123 Engine Wiring Harness (L8T)

(9) J107 Engine Wiring Harness

(10) J112 Engine Wiring Harness

(11) X202 Instrument Panel Wiring Harness to Engine Wiring Harness

(12) X101 Engine Wiring Harness to Chassis Wiring Harness

(13) X100 Instrument Panel Wiring Harness to Engine Wiring Harness

(14) X155 Engine Wiring Harness to Engine Coolant Temperature Sensor Wiring Harness

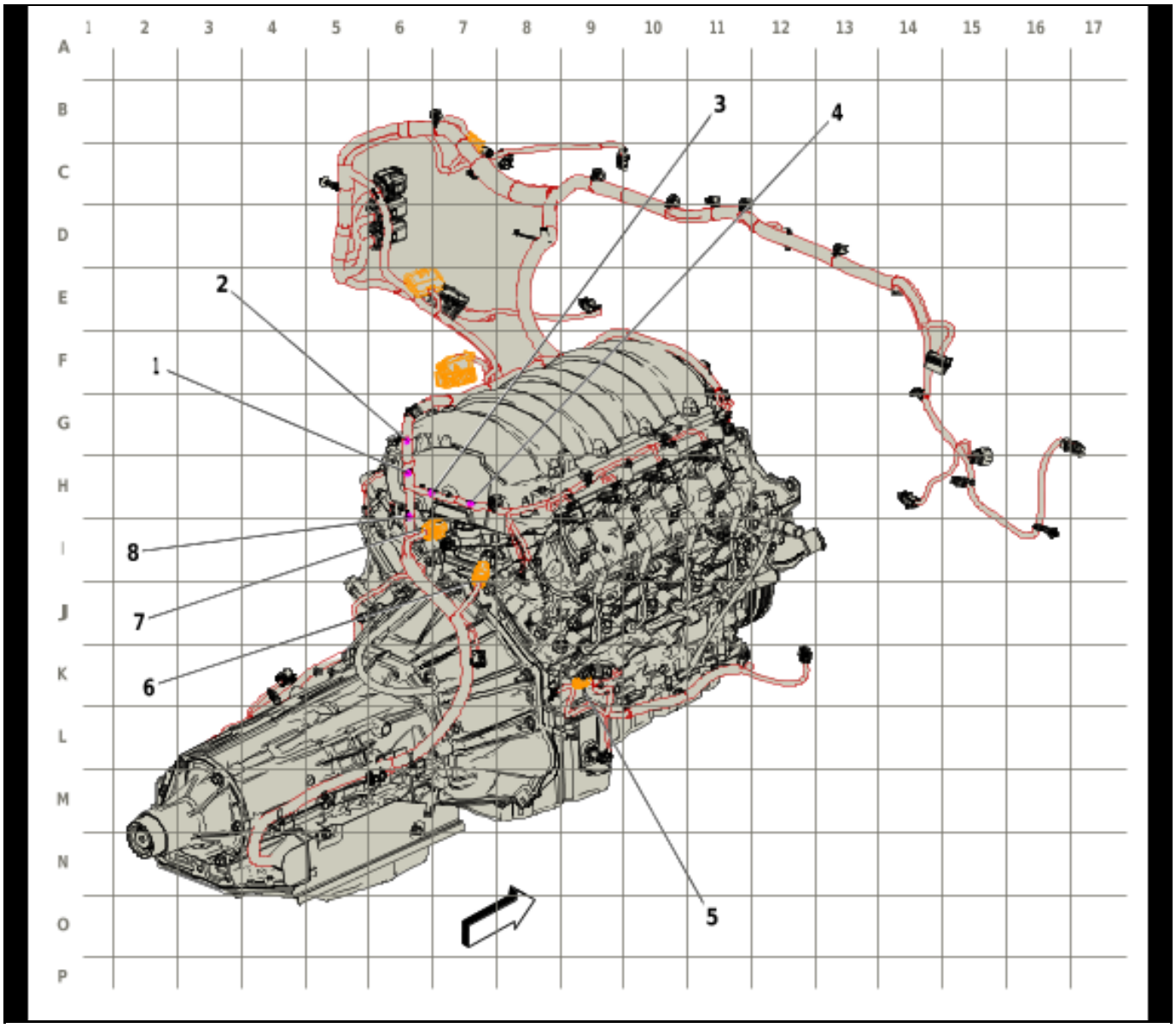
(15) X130 Engine Wiring Harness to Camshaft Position Sensor Jumper Wiring Harness

(16) J131 Engine Wiring Harness

(17) X135 Engine Jumper Wiring Harness to Oil Pump Flow Control Solenoid Valve Wire Wiring Harness (L8T)

(18) J130 Engine Wiring Harness

Harness Routing Views (Engine Harness Routing - Rear (L8T))



6040696

Items

(1) J143 Engine Wiring Harness

(2) J188 Right Ignition Coil Wiring Harness

(3) J183 Right Ignition Coil Wiring Harness (L8T)

(4) J108 Engine Wiring Harness (L8T)

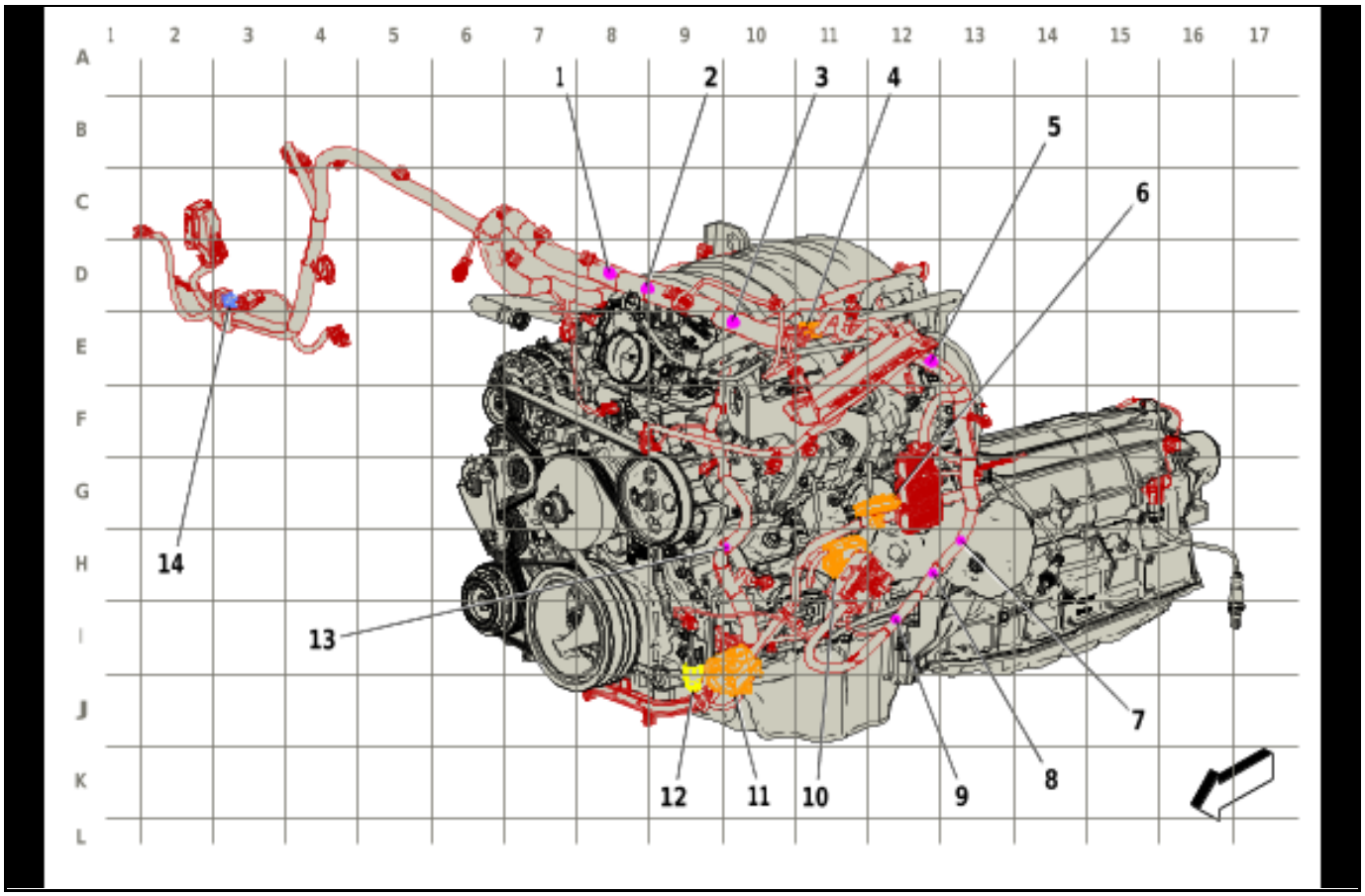
(5) X103 Engine Wiring Harness to Starter Motor Jumper Wiring Harness

(6) X161 Engine Wiring Harness to Fuel Injector Wiring Harness

(7) X160 Engine Wiring Harness to Fuel Injector Wiring Harness

(8) J144 Engine Wiring Harness

Harness Routing Views (Engine Harness Routing - Front (LV1))

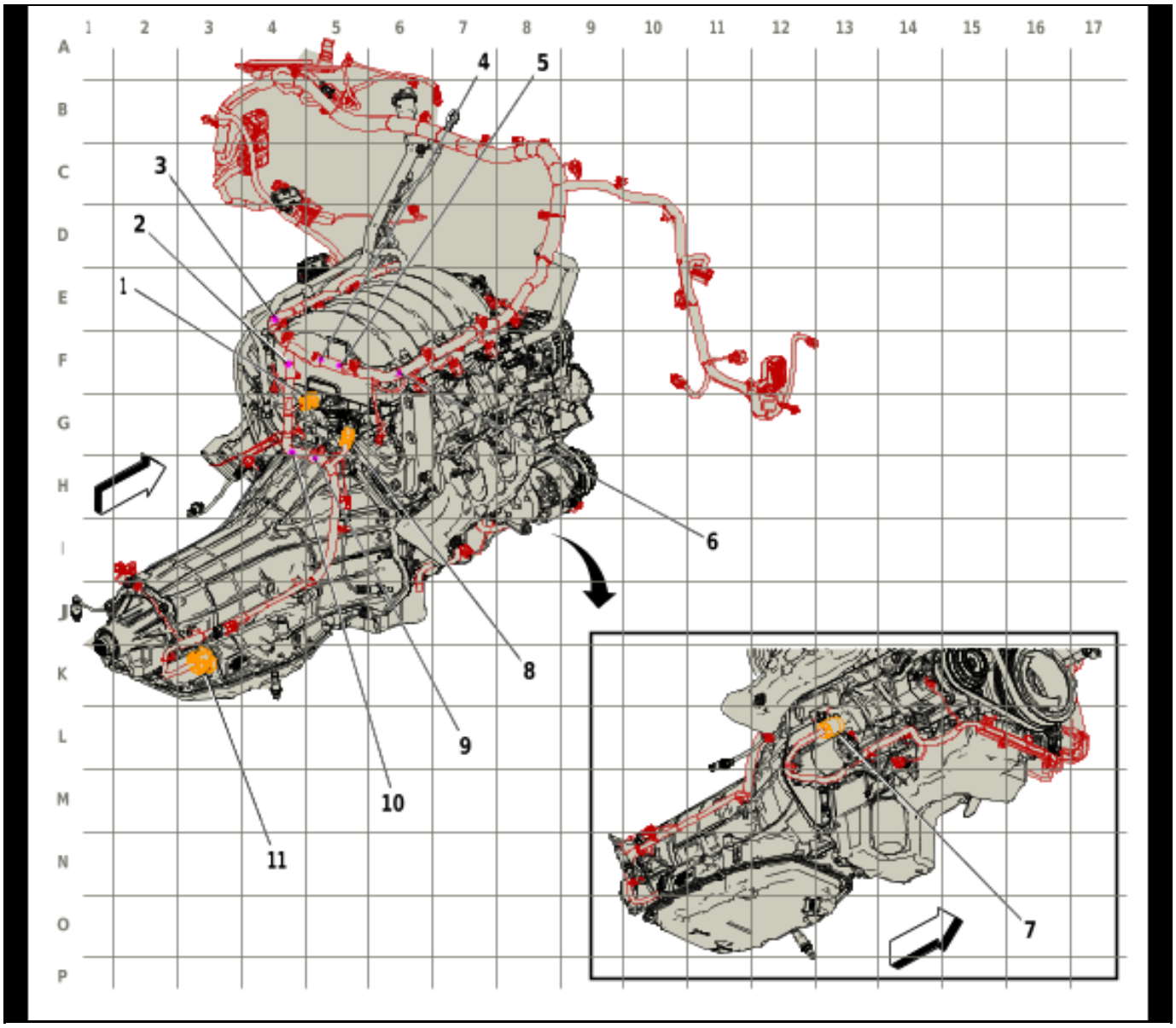


6003041

Items

(1) J188 Right Ignition Coil Wiring Harness
(2) J112 Engine Wiring Harness
(3) J182 Left Ignition Coil Wiring Harness
(4) X109 Engine Wiring Harness to Underhood Lamp Wiring Harness (TR9)
(5) J115 Engine Wiring Harness
(6) X102 Chassis Wiring Harness to Fuel Tank Wiring Harness
(7) J185 Right Ignition Coil Wiring Harness (LV1)
(8) J184 Left Ignition Coil Wiring Harness (LV1)
(9) J107 Engine Wiring Harness
(10) X101 Engine Wiring Harness to Chassis Wiring Harness
(11) X100 Instrument Panel Wiring Harness to Engine Wiring Harness
(12) X130 Engine Wiring Harness to Camshaft Position Sensor Jumper Wiring Harness
(13) J101 Engine Wiring Harness
(14) R6A Terminating Resistor - High Speed Bus

Harness Routing Views (Engine Harness Routing - Rear (LV1))

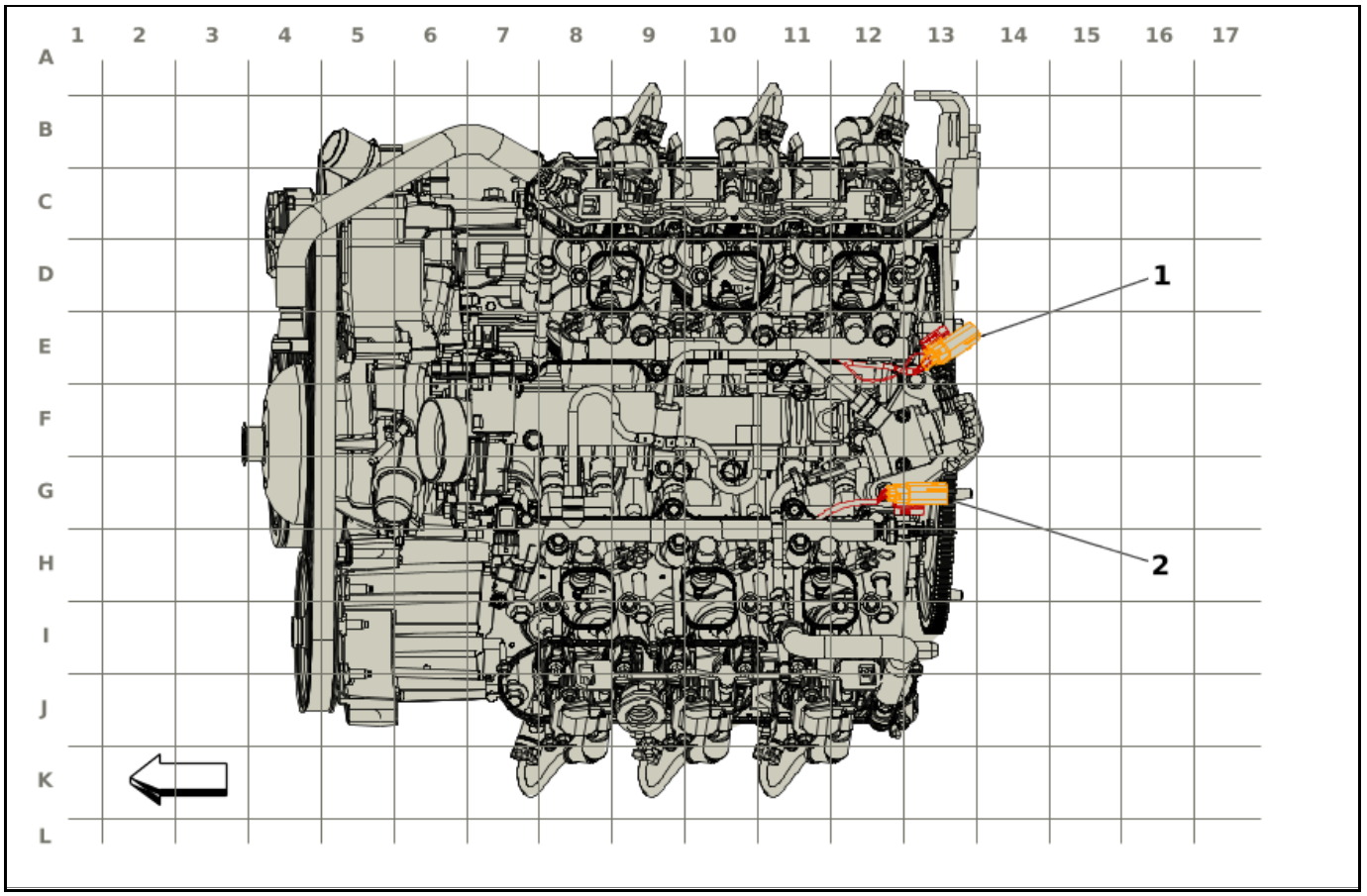


6003043

Items

(1) X160 Engine Wiring Harness to Fuel Injector Wiring Harness
(2) J143 Engine Wiring Harness
(3) J131 Engine Wiring Harness
(4) J170 Engine Wiring Harness (LV1)
(5) J171 Engine Wiring Harness (LV1)
(6) J102 Engine Wiring Harness
(7) X103 Engine Wiring Harness to Starter Motor Jumper Wiring Harness
(8) X161 Engine Wiring Harness to Fuel Injector Wiring Harness
(9) J130 Engine Wiring Harness
(10) J144 Engine Wiring Harness
(11) X175 Engine Wiring Harness to Automatic Transmission Wiring Harness (M5U)

Harness Routing Views (Fuel Injector Harness Routing (LV1))



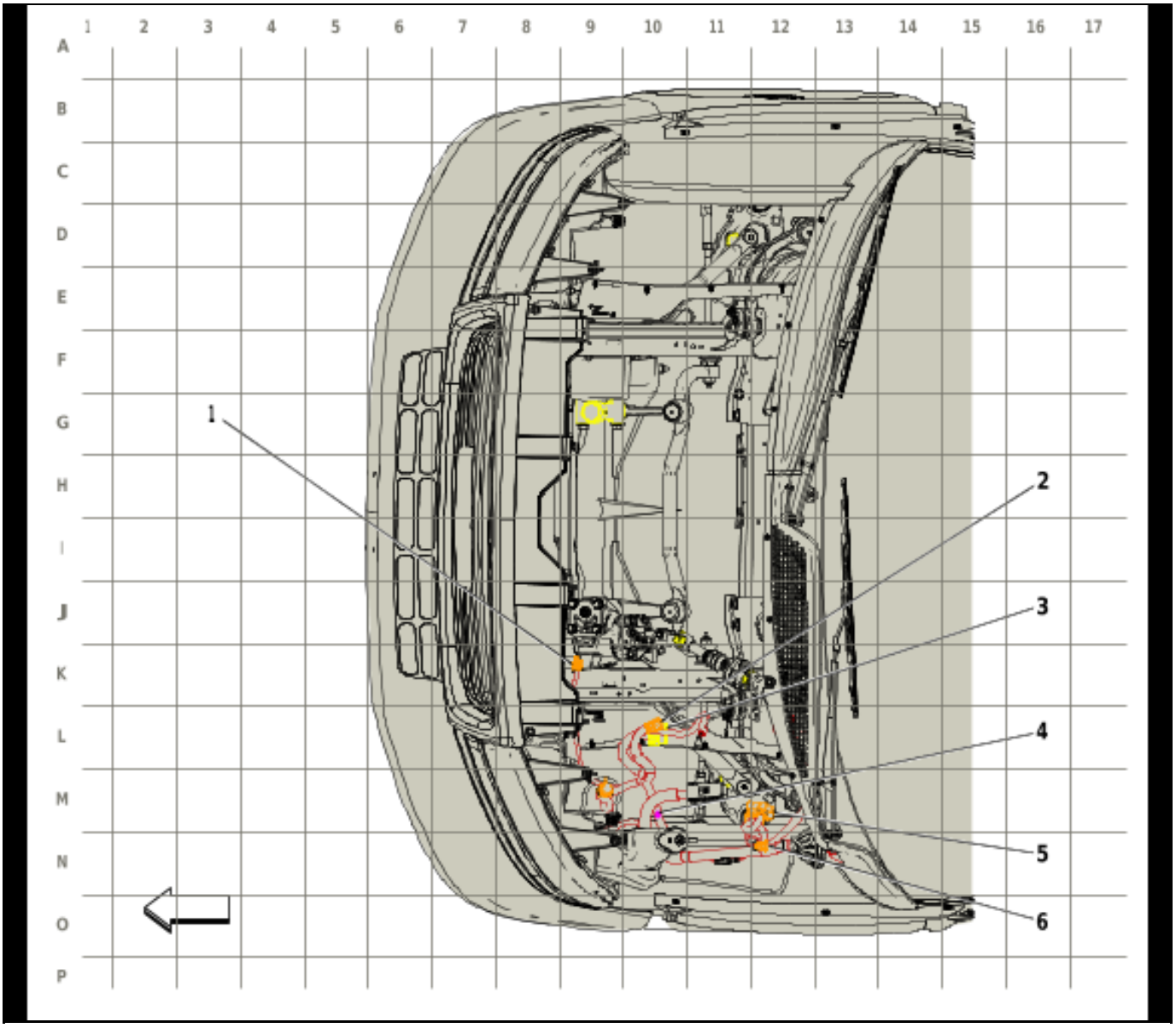
4861805

Items

(1) X161 Engine Wiring Harness to Fuel Injector Wiring Harness

(2) X160 Engine Wiring Harness to Fuel Injector Wiring Harness

Harness Routing Views (Instrument Panel Harness Routing - Engine Compartment)



6040698

Items

(1) X104 Instrument Panel Wiring Harness to Air Bag Jumper Wiring Harness

(2) X185 Instrument Panel Wiring Harness to Chassis Wiring Harness

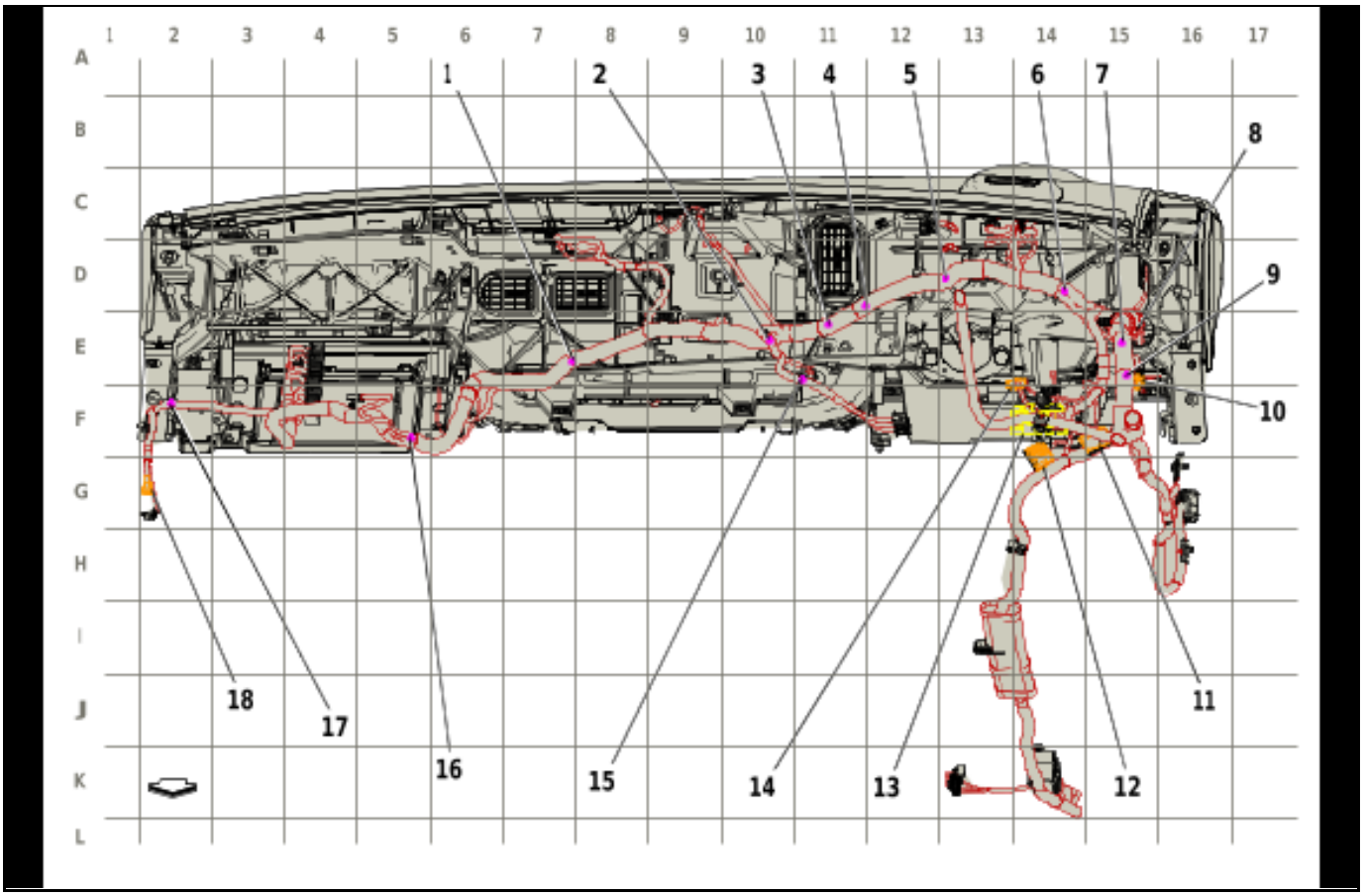
(3) X100 Instrument Panel Wiring Harness to Engine Wiring Harness

(4) J211 Instrument Panel (UD7/UFT)

(5) X202 Instrument Panel Wiring Harness to Engine Wiring Harness

(6) X141 Instrument Panel Wiring Harness to Brake Fluid Level Indicator Wiring Harness (UJ1)

Harness Routing Views (Instrument Panel Harness Routing - Rear of Instrument Panel)

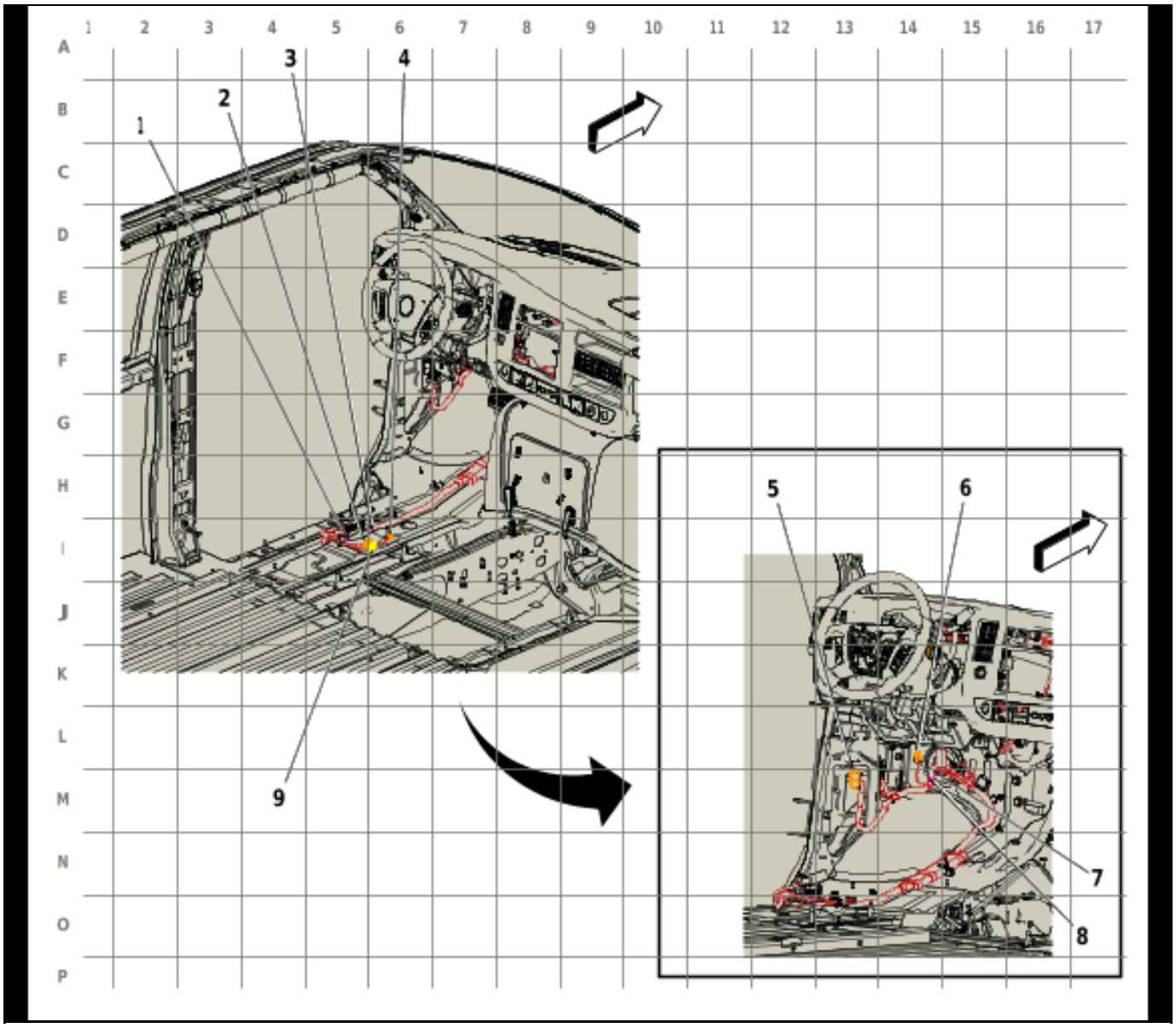


6040700

Items

(1) J241 Instrument Panel
(2) J271 Instrument Panel (U2K/UE1)
(3) J245 Instrument Panel (DE5)
(4) J246 Instrument Panel (DE5)
(5) J207 Instrument Panel
(6) J248 Instrument Panel
(7) J263 Instrument Panel (TP3)
(8) J244 Instrument Panel
(9) J247 Instrument Panel
(10) X206 Instrument Panel Wiring Harness to Instrument Panel Wiring Harness
(11) JX200 Instrument Panel Wiring Harness
(12) JX250 Instrument Panel Wiring Harness
(13) X200 Steering Wheel Air Bag Coil Jumper Wiring Harness to Instrument Panel Wiring Harness
(14) X225 Accelerator Control Wiring Harness to Instrument Panel Wiring Harness
(15) J270 Instrument Panel (U2K)
(16) J250 Instrument Panel
(17) J249 Instrument Panel
(18) X221 Instrument Panel Wiring Harness to Antenna Wiring Harness

Harness Routing Views (Instrument Panel Harness Routing - Driver Side)



6040701

Items

(1) J223 Instrument Panel (UVC)

(2) X331 Instrument Panel Wiring Harness to Body Wiring Harness

(3) J280 Instrument Panel (Cutaway without YF7)

(4) X329 Instrument Panel Wiring Harness to Body Wiring Harness (UVC)

(5) X318 Instrument Panel Wiring Harness to Body Wiring Harness

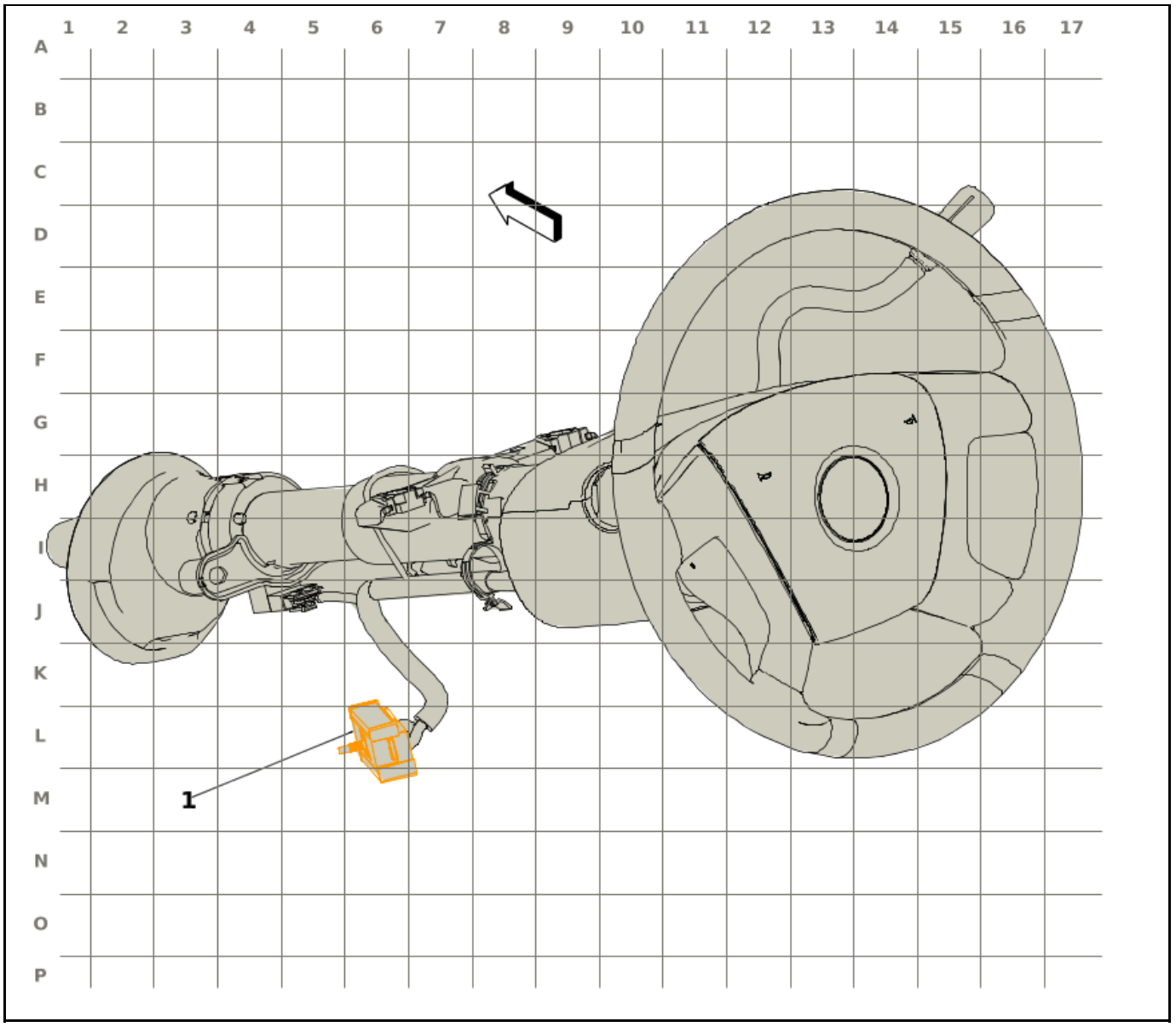
(6) X220 Instrument Panel Wiring Harness to Park Brake Switch Jumper Wiring Harness

(7) W8 Blunt Cut - Trailer Provision (UY7)

(8) J201 Instrument Panel (UFL)

(9) X330 Instrument Panel Wiring Harness to Body Wiring Harness

Harness Routing Views (Steering Column Harness Routing)

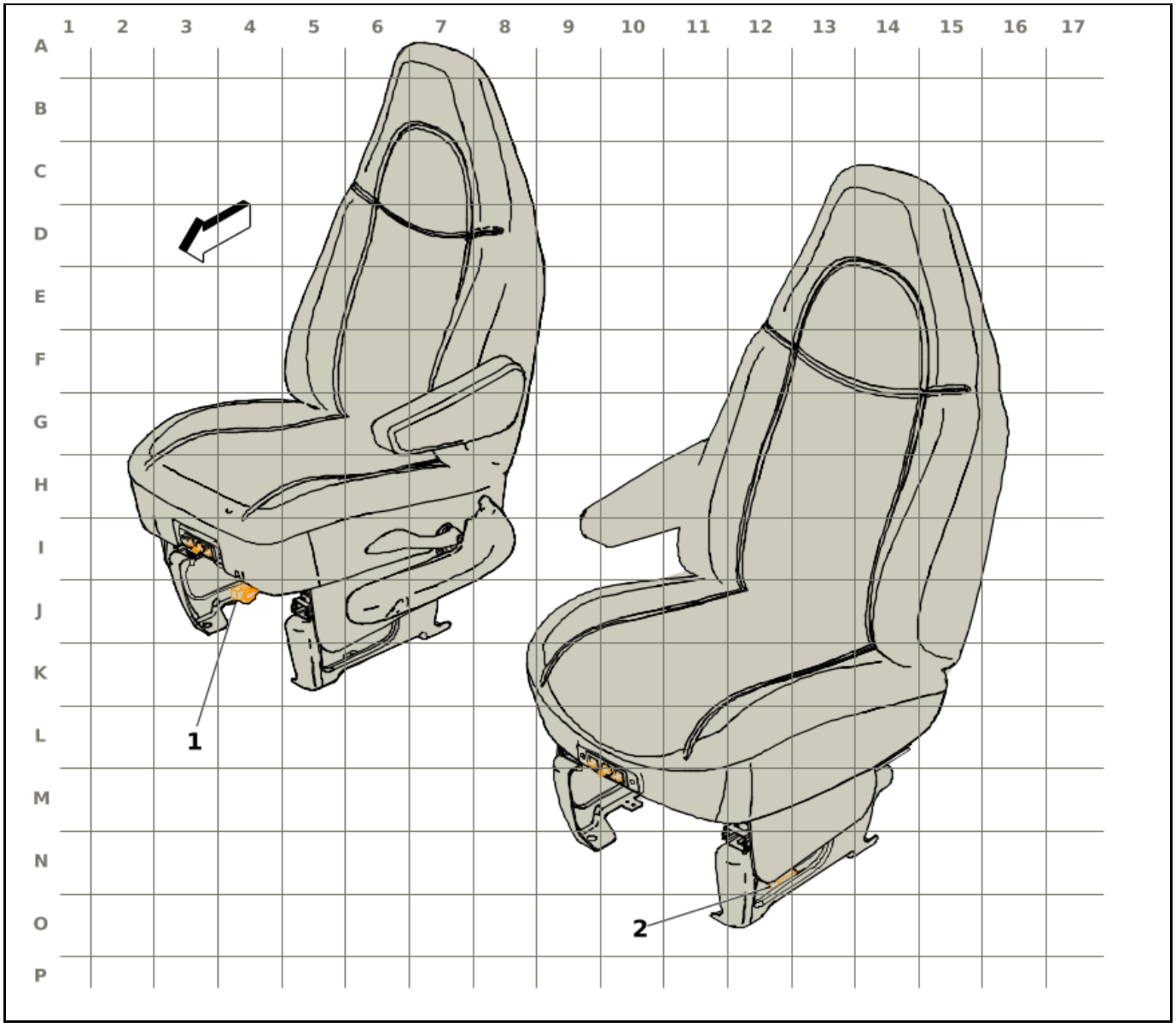


4004323

Items

(1) X200 Steering Wheel Air Bag Coil Jumper Wiring Harness to Instrument Panel Wiring Harness

Harness Routing Views (Driver Seat Harness Routing and Front Passenger Seat Harness Routing)



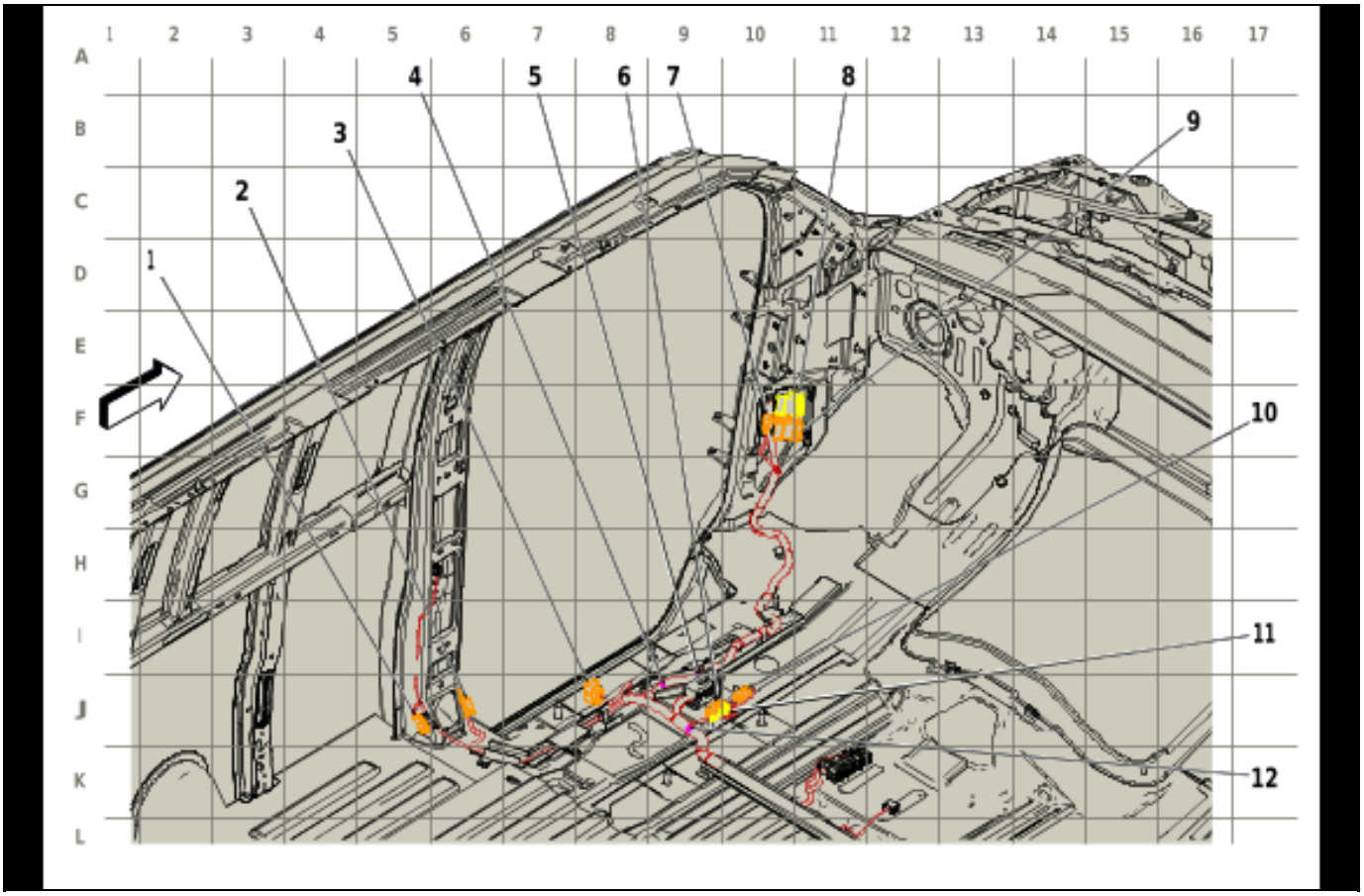
2830793

Items

(1) X306 Body Wiring Harness to Seat Wiring Harness - Passenger

(2) X307 Body Wiring Harness to Seat Wiring Harness - Driver

Harness Routing Views (Body Harness Routing - Left Front Passenger Compartment (Passenger))



6003044

Items

(1) X323 Airbag Wiring Harness to Body Wiring Harness (ASF)

(2) JX347 Body Wiring Harness

(3) X307 Body Wiring Harness to Seat Wiring Harness - Driver

(4) J357 Body Wiring Harness

(5) J356 Body Wiring Harness

(6) X331 Instrument Panel Wiring Harness to Body Wiring Harness

(7) X319 Auxiliary Heater Front Wiring Harness to Body Wiring Harness (ENC/C69/C36)

(8) X318 Instrument Panel Wiring Harness to Body Wiring Harness

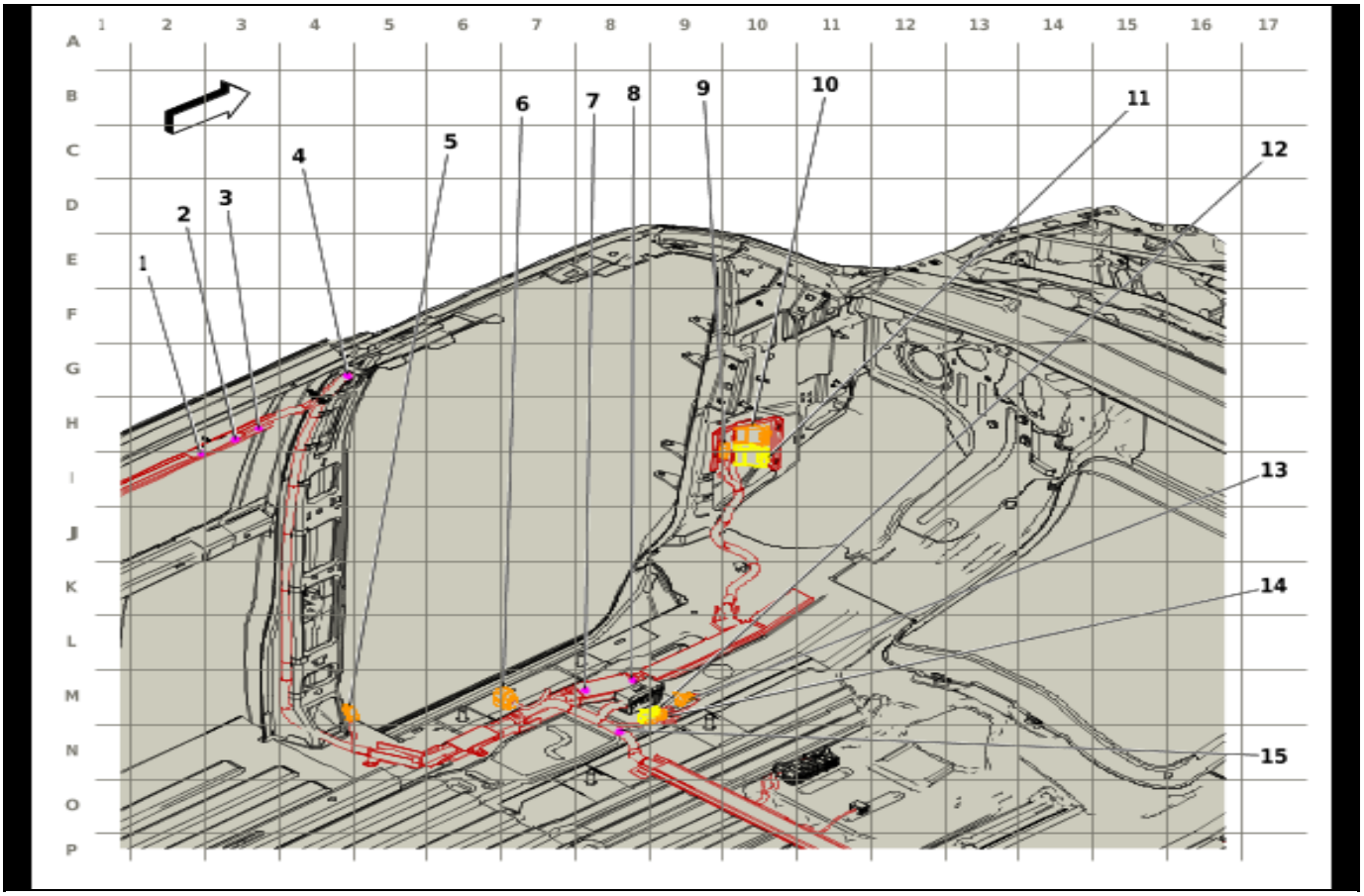
(9) X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness

(10) X329 Instrument Panel Wiring Harness to Body Wiring Harness (UVC)

(11) X330 Instrument Panel Wiring Harness to Body Wiring Harness

(12) J334 Body Wiring Harness (UVC)

Harness Routing Views (Body Harness Routing - Left Front Passenger Compartment (Cargo))



6003045

Items

(1) J374 Body Wiring Harness (Cargo without YF7)

(2) J311 Body Wiring Harness (C69)

(3) J310 Body Wiring Harness (C69)

(4) J308 Body Wiring Harness (C69)

(5) JX347 Body Wiring Harness

(6) X307 Body Wiring Harness to Seat Wiring Harness - Driver

(7) J357 Body Wiring Harness

(8) J356 Body Wiring Harness

(9) X319 Auxiliary Heater Front Wiring Harness to Body Wiring Harness (ENC/C69/C36)

(10) X318 Instrument Panel Wiring Harness to Body Wiring Harness

(11) X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness

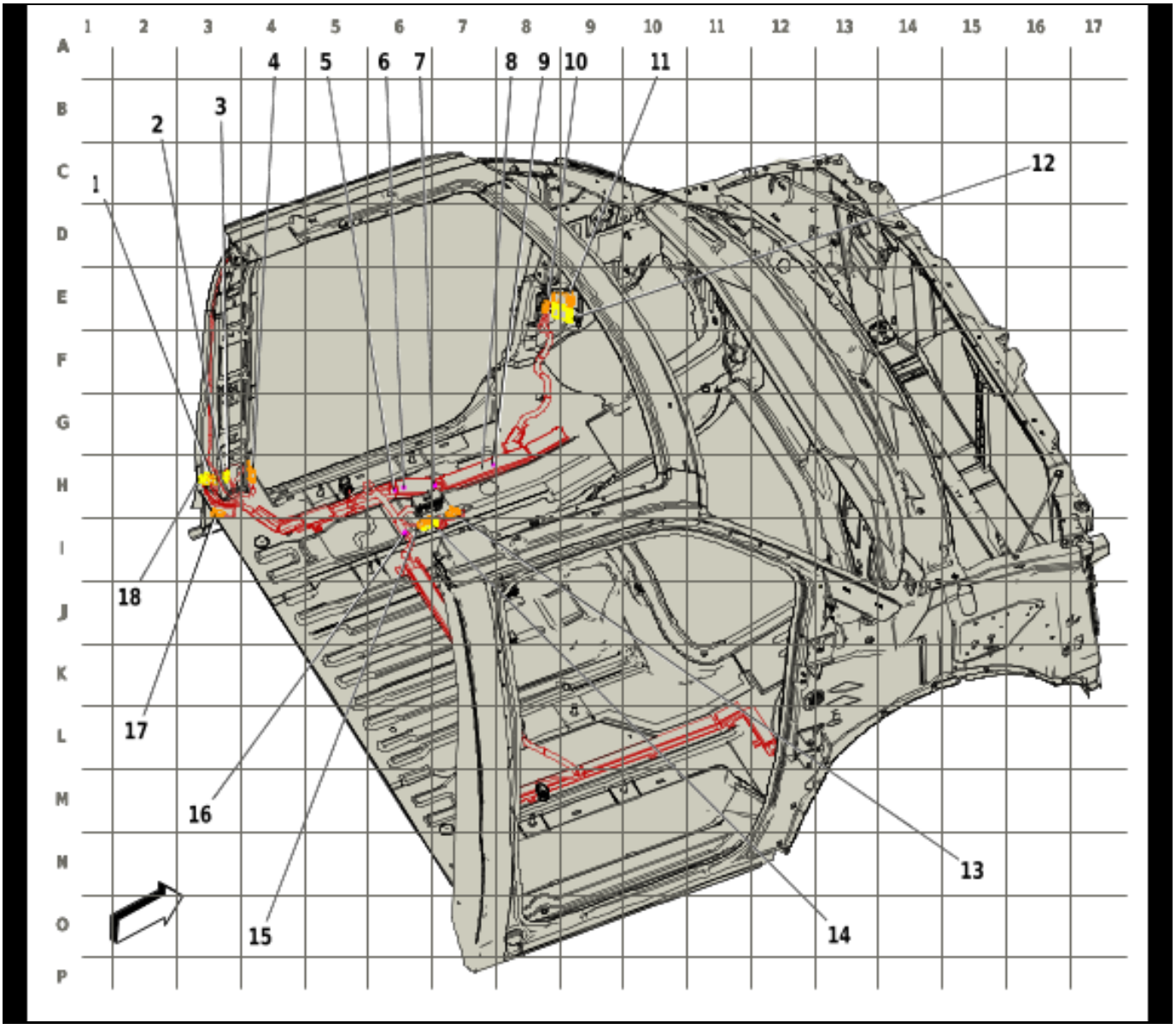
(12) X331 Instrument Panel Wiring Harness to Body Wiring Harness

(13) X329 Instrument Panel Wiring Harness to Body Wiring Harness (UVC)

(14) X330 Instrument Panel Wiring Harness to Body Wiring Harness

(15) J334 Body Wiring Harness (UVC)

Harness Routing Views (Body Harness Routing - Left Front Passenger Compartment (Cutaway))



6003046

Items

(1) X289 Side Access Panel Wiring Harness to Instrument Panel Wiring Harness (PRP)

(2) X409 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness (C36/C69)

(3) X407 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness (C36/C69)

(4) JX347 Body Wiring Harness

(5) J311 Body Wiring Harness (C69)

(6) J310 Body Wiring Harness (C69)

(7) J308 Body Wiring Harness (C69)

(8) J357 Body Wiring Harness

(9) J355 Front Headliner Wiring Harness (C69 with YF7)

(10) X319 Auxiliary Heater Front Wiring Harness to Body Wiring Harness (ENC/C69/C36)

(11) X318 Instrument Panel Wiring Harness to Body Wiring Harness

(12) X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness

(13) X329 Instrument Panel Wiring Harness to Body Wiring Harness (UVC)

(14) X330 Instrument Panel Wiring Harness to Body Wiring Harness

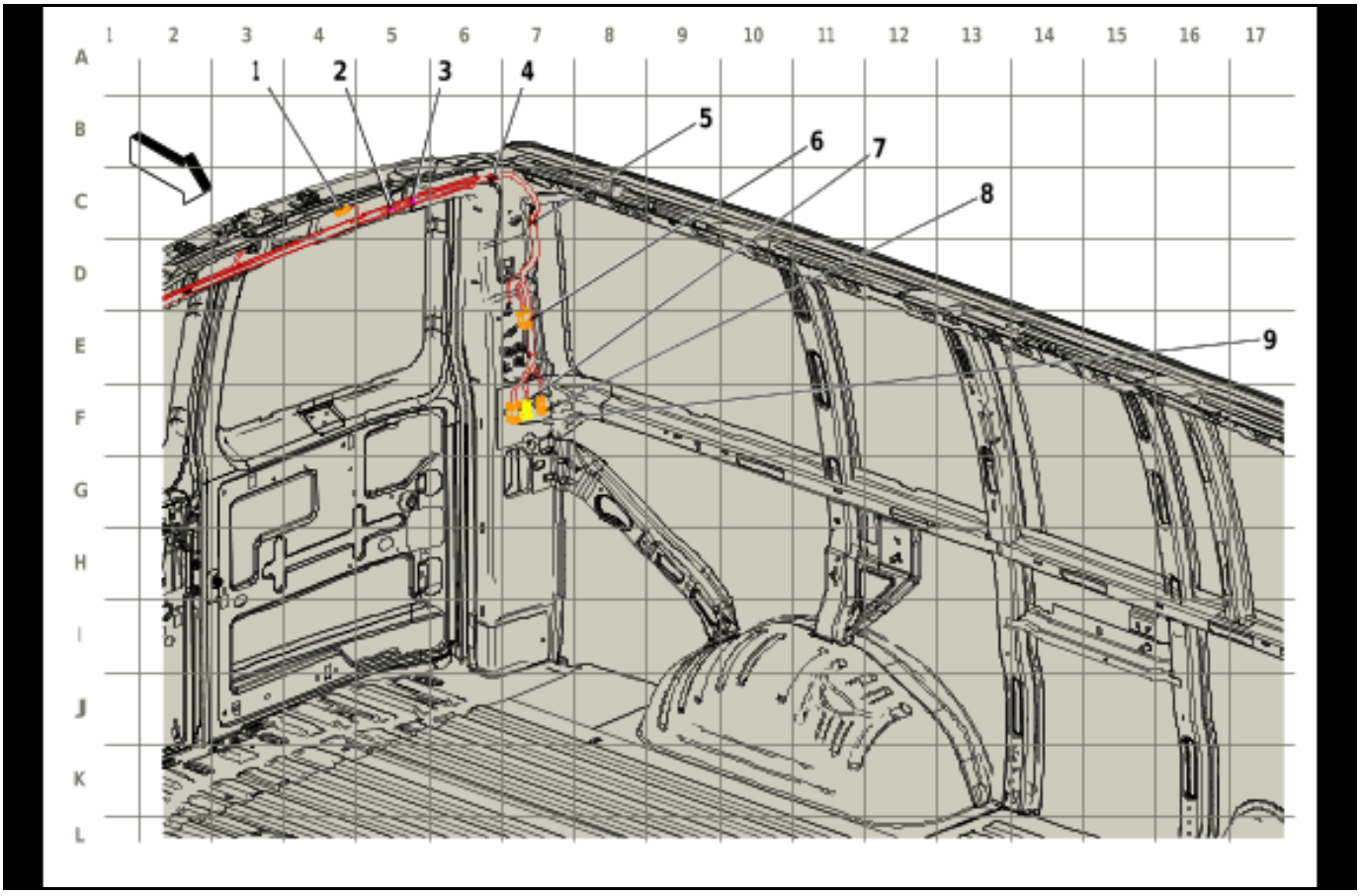
(15) X331 Instrument Panel Wiring Harness to Body Wiring Harness

(16) J334 Body Wiring Harness (UVC)

(17) X403 Rear Door Door Wiring Harness to Body Wiring Harness (UVC)

(18) W22 Blunt Cut - Rear Speaker Provision (CUTAWAY with YF1)

Harness Routing Views (Body Harness Routing - Left Rear Passenger Compartment (Passenger))



6003047

Items

(1) X419 Center High Mounted Stop Lamp Jumper Wiring Harness to Body Wiring Harness (Passenger/Cargo)

(2) J452 Body Wiring Harness

(3) J453 Body Wiring Harness

(4) J410 Body Wiring Harness (Cargo/ Passenger)

(5) J401 Body Wiring Harness (C36/C49/C69)

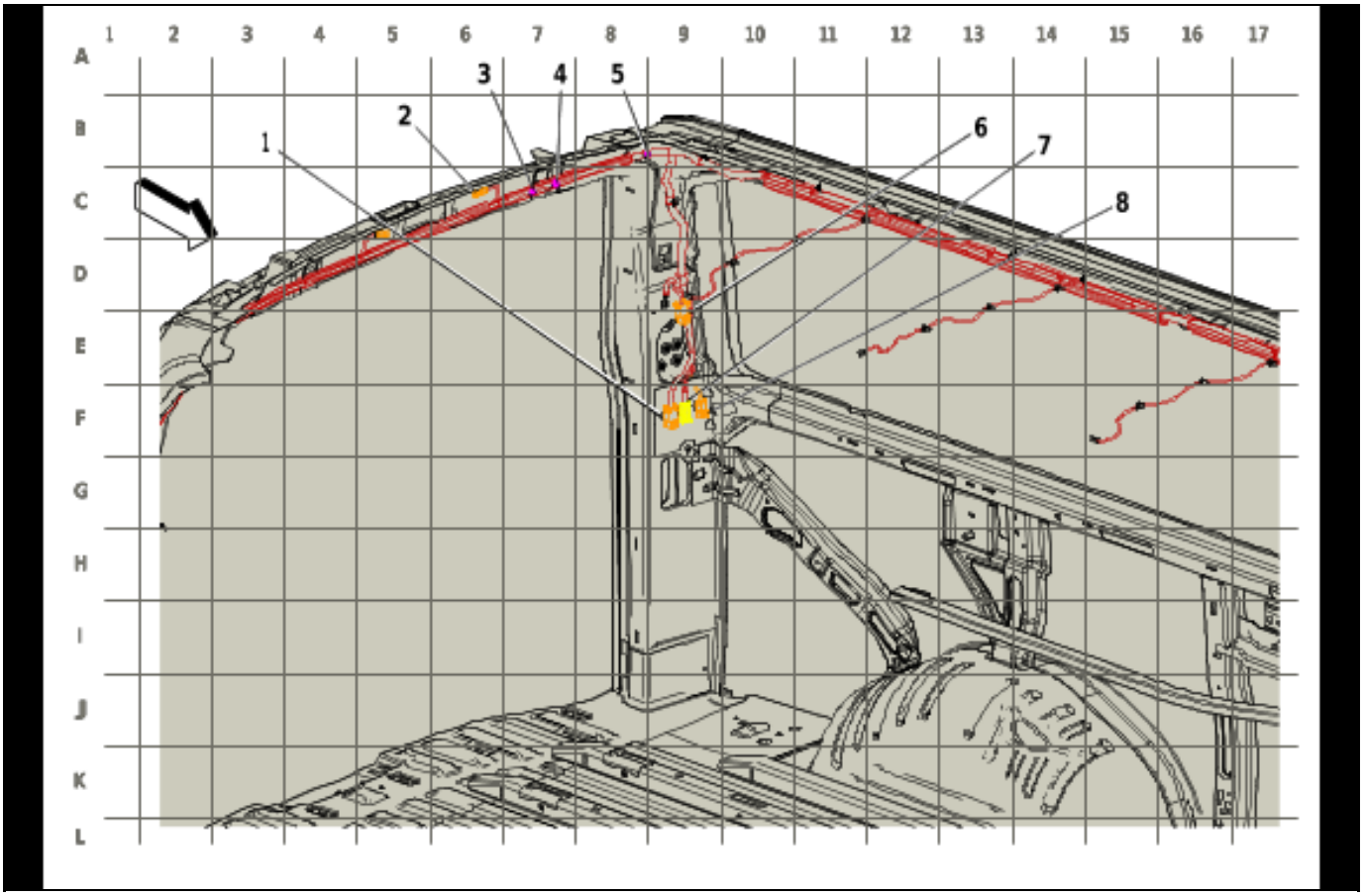
(6) X410 Tail Lamp Wiring Harness to Body Wiring Harness (Passenger/Cargo)

(7) X409 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness (C36/C69)

(8) X407 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness (C36/C69)

(9) X411 Rear Door Door Wiring Harness - Left to Body Wiring Harness (Passenger/Cargo)

Harness Routing Views (Body Harness Routing - Left Rear Passenger Compartment (Cargo))



6003048

Items

(1) X411 Rear Door Door Wiring Harness - Left to Body Wiring Harness (Passenger/Cargo)

(2) X419 Center High Mounted Stop Lamp Jumper Wiring Harness to Body Wiring Harness (Passenger/Cargo)

(3) J453 Body Wiring Harness

(4) J452 Body Wiring Harness

(5) J410 Body Wiring Harness (Cargo/ Passenger)

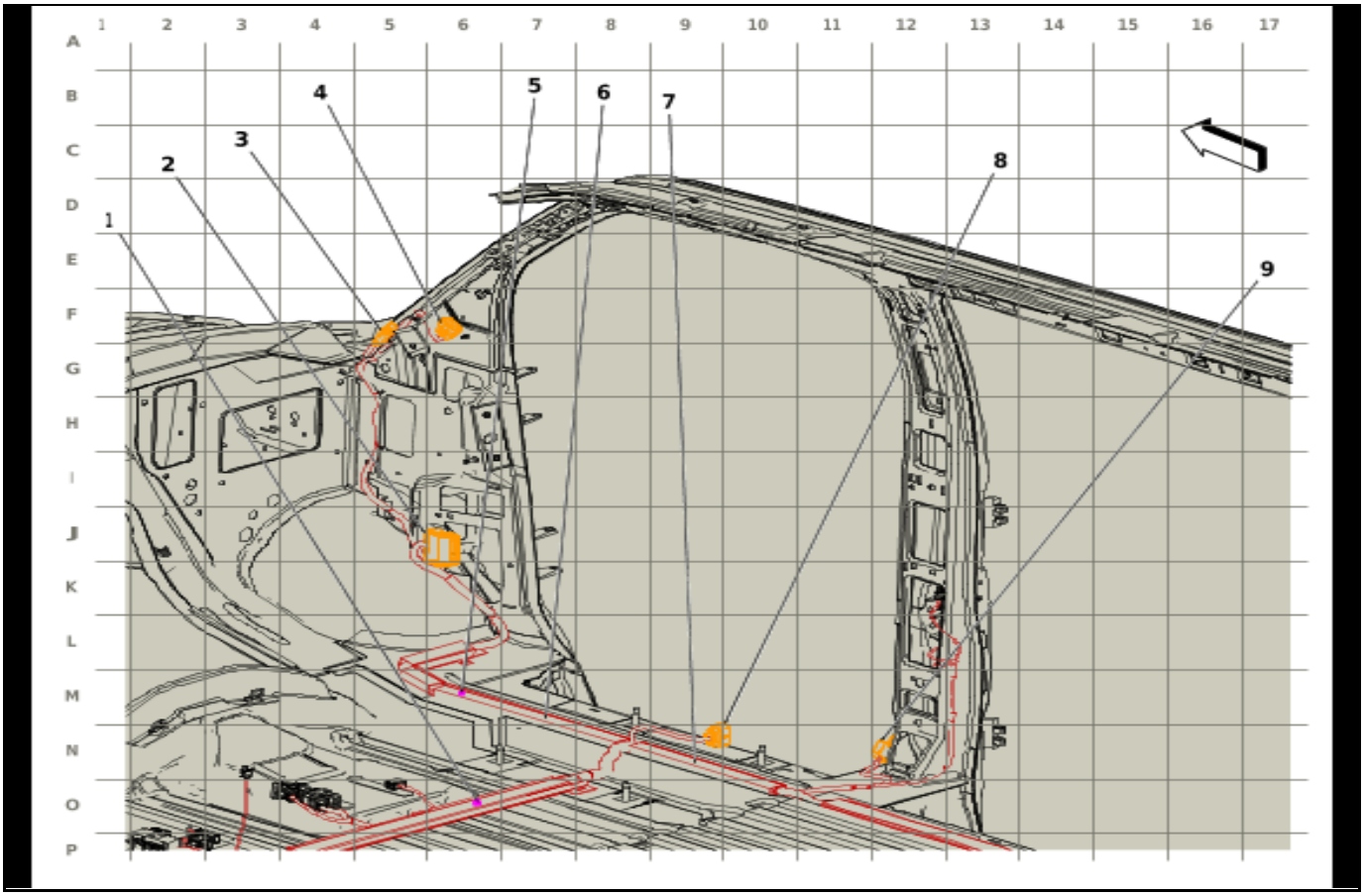
(6) J375 Body Wiring Harness (Cargo without YF7)

(7) X410 Tail Lamp Wiring Harness to Body Wiring Harness (Passenger/Cargo)

(8) X409 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness (C36/C69)

(9) X407 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness (C36/C69)

Harness Routing Views (Body Harness Routing - Right Front Passenger Compartment)



6003049

Items

(1) J359 Body Wiring Harness (U80)

(2) X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness

(3) X205 Roof Console Wiring Harness to Body Wiring Harness

(4) X204 Body Wiring Harness to Roof Console Wiring Harness

(5) J322 Body Wiring Harness (Cargo/ Passenger with AU3)

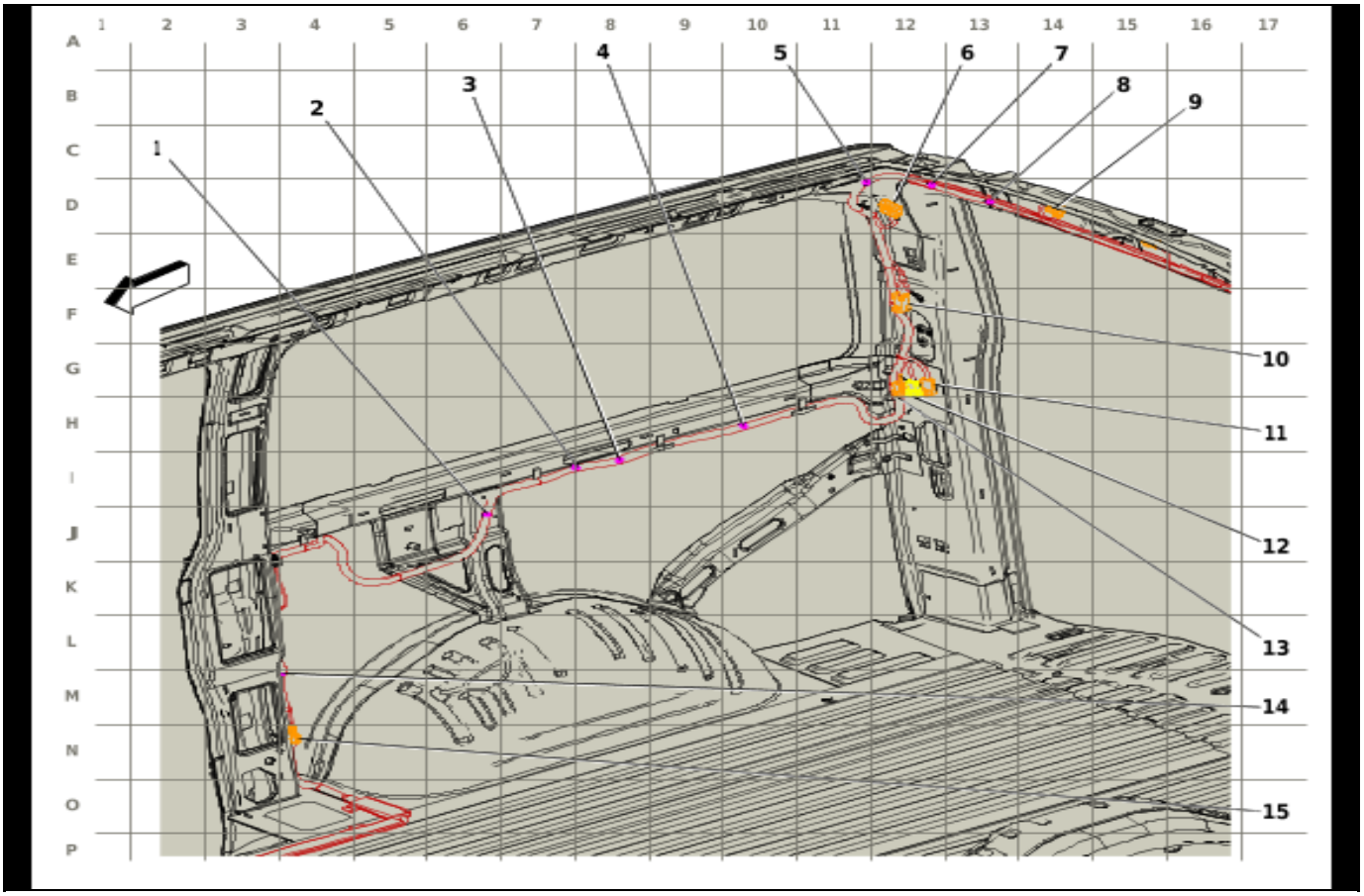
(6) J323 Body Wiring Harness (Cargo/ Passenger with AU3)

(7) J331 Body Wiring Harness (Passenger)

(8) X306 Body Wiring Harness to Seat Wiring Harness - Passenger

(9) JX348 Body Wiring Harness

Harness Routing Views (Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger))



6003050

Items

(1) J376 Body Wiring Harness (Cargo/ Passenger)

(2) J308 Body Wiring Harness (C69)

(3) J310 Body Wiring Harness (C69)

(4) J311 Body Wiring Harness (C69)

(5) J403 Body Wiring Harness (Cargo/ Passenger)

(6) X421 Roof Console Wiring Harness to Body Wiring Harness

(7) J451 Body Wiring Harness

(8) J450 Body Wiring Harness

(9) X415 Radio Rear Speaker Wiring Harness to Body Wiring Harness (Passenger/Cargo)

(10) X420 Tail Lamp Wiring Harness to Body Wiring Harness (Passenger/Cargo)

(11) X412 Rear Door Door Wiring Harness to Body Wiring Harness (Passenger/Cargo)

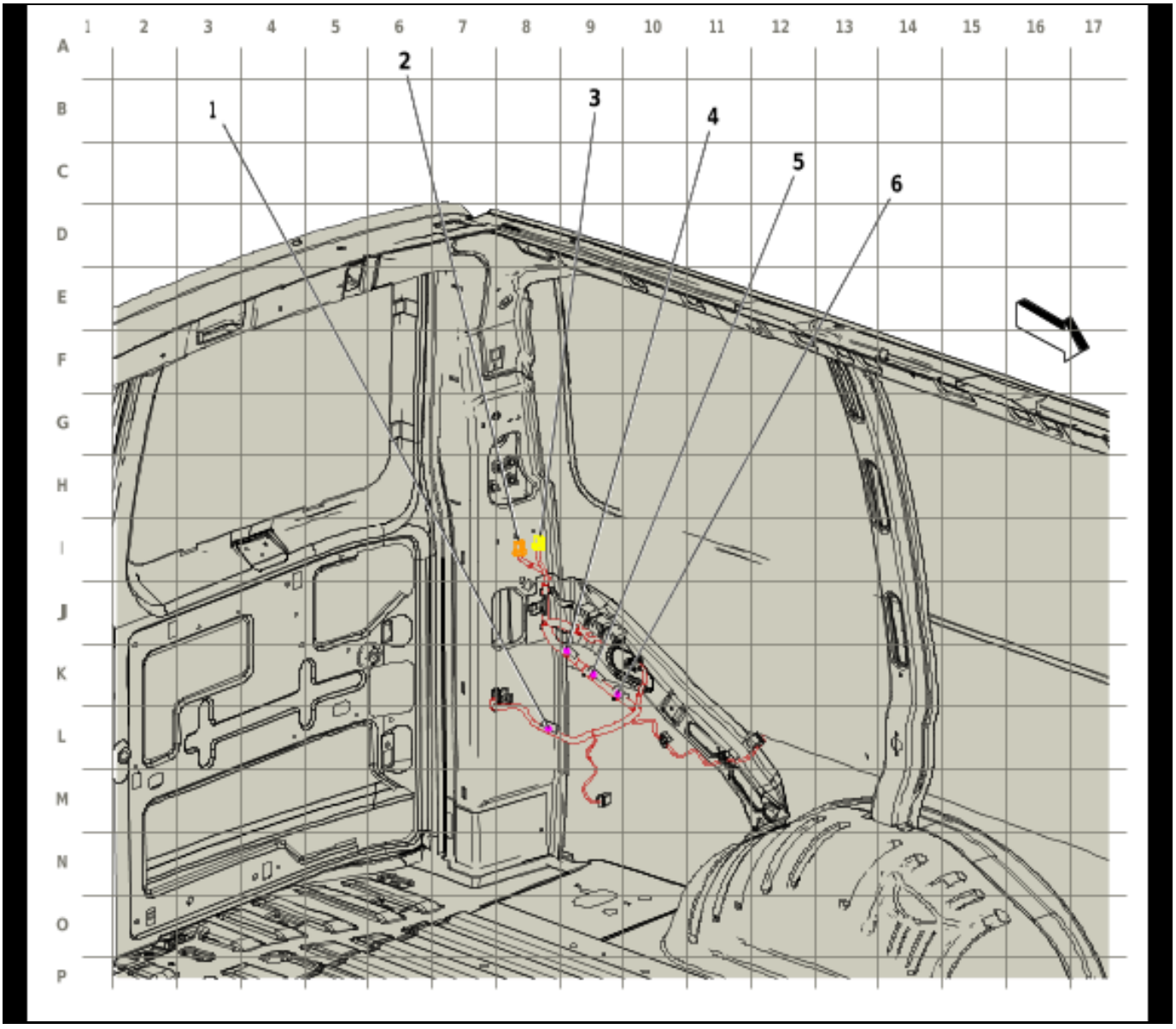
(12) X400 Rear Door Door Wiring Harness to Body Wiring Harness (Passenger/Cargo)

(13) X403 Rear Door Door Wiring Harness to Body Wiring Harness (UVC)

(14) J373 Body Wiring Harness (Passenger)

(15) X324 Airbag Wiring Harness to Body Wiring Harness (ASF)

Harness Routing Views (Auxiliary HVAC Harness Routing - Left Rear Passenger Compartment (C36/C69))



6040703

Items

(1) J413 Rear HVAC Wiring Harness (C36/C70)

(2) X409 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness (C36/C69)

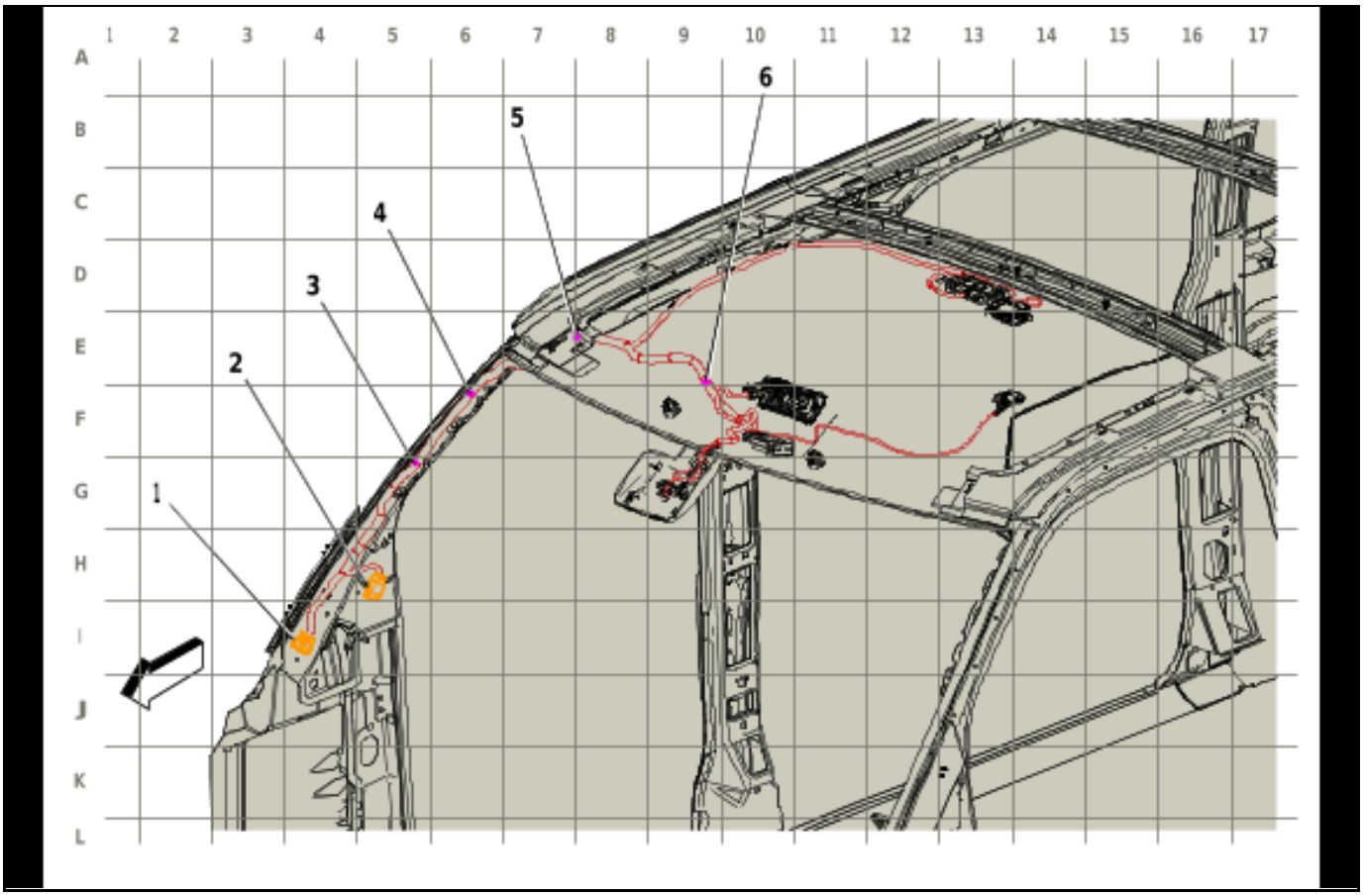
(3) X407 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness (C36/C69)

(4) J412 Rear HVAC Wiring Harness (C36/C69)

(5) J405 Rear HVAC Wiring Harness (C36/C69)

(6) J411 Rear HVAC Wiring Harness (C69)

Harness Routing Views (Roof Harness Routing - Front)



6003051

Items

(1) X205 Roof Console Wiring Harness to Body Wiring Harness

(2) X204 Body Wiring Harness to Roof Console Wiring Harness

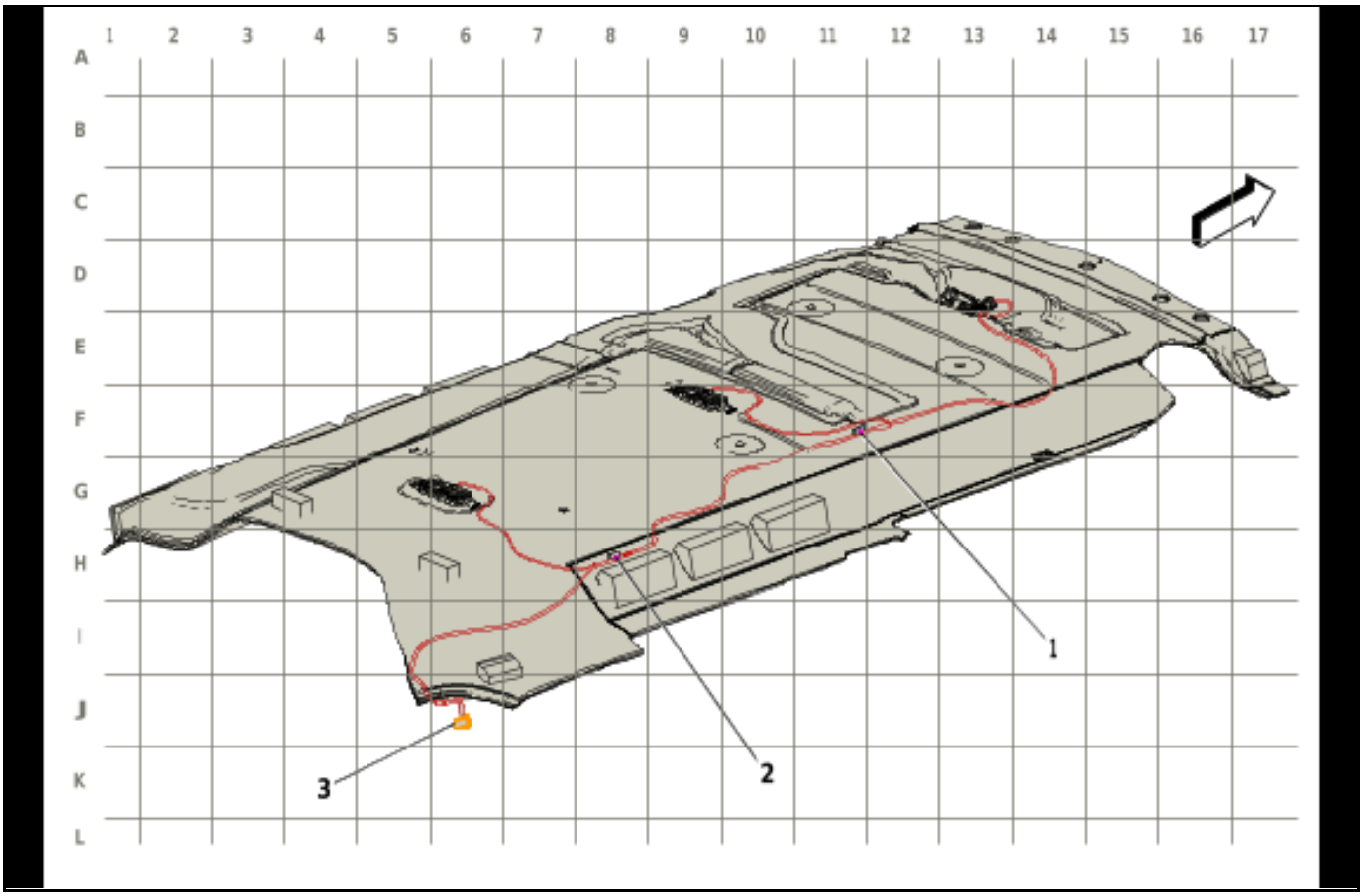
(3) J314 Front Headliner Wiring Harness

(4) J333 Front Headliner Wiring Harness (DH6 without YF7)

(5) J335 Front Headliner Wiring Harness (U80)

(6) J307 Front Headliner Wiring Harness (C69 with YF7)

Harness Routing Views (Roof Harness Routing - Rear)



6003052

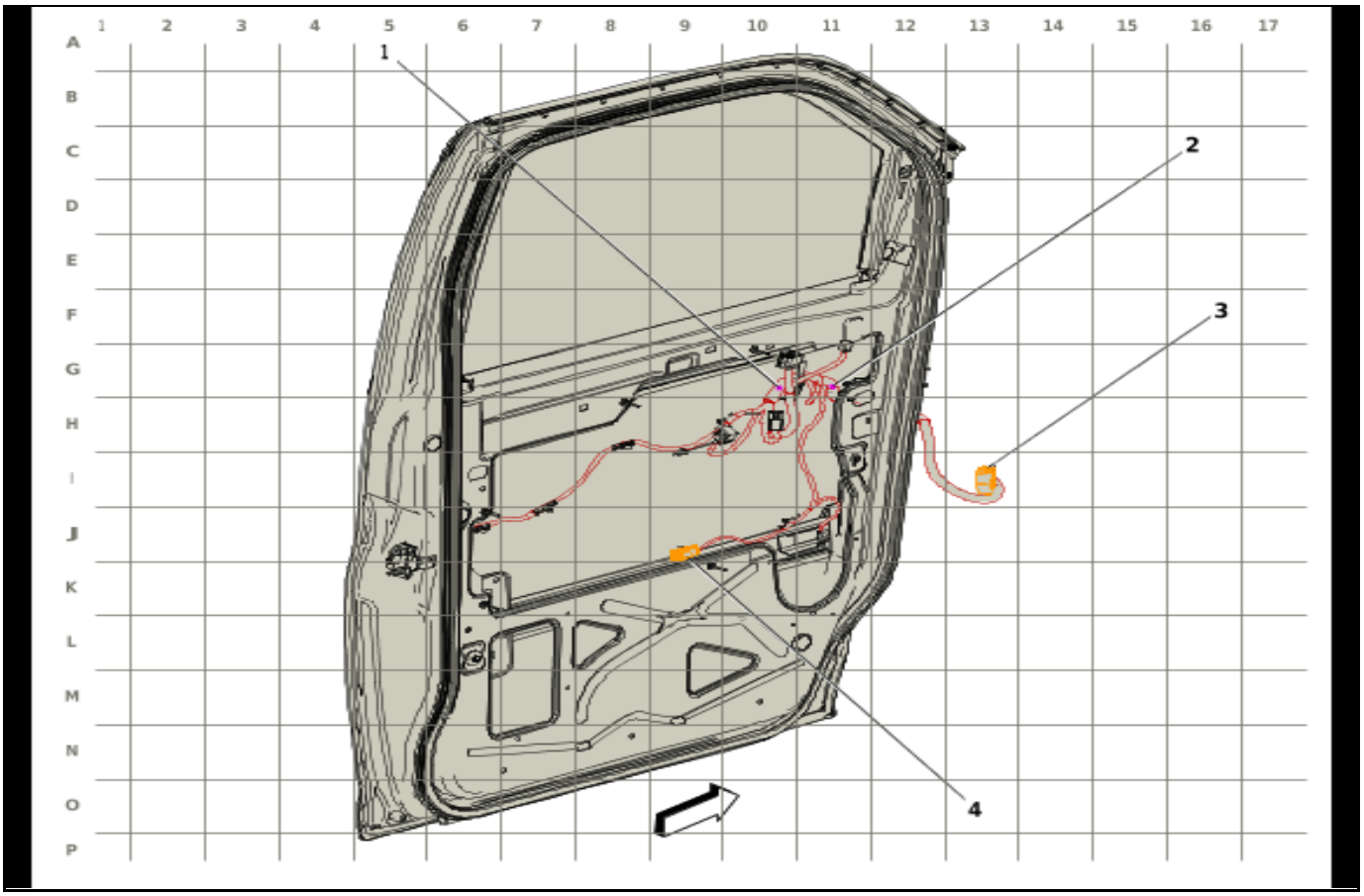
Items

(1) J330 Rear Headliner Wiring Harness (Passenger)

(2) J407 Rear Headliner Wiring Harness (Passenger)

(3) X421 Roof Console Wiring Harness to Body Wiring Harness

Harness Routing Views (Door Harness Routing - Driver Door)



6003053

Items

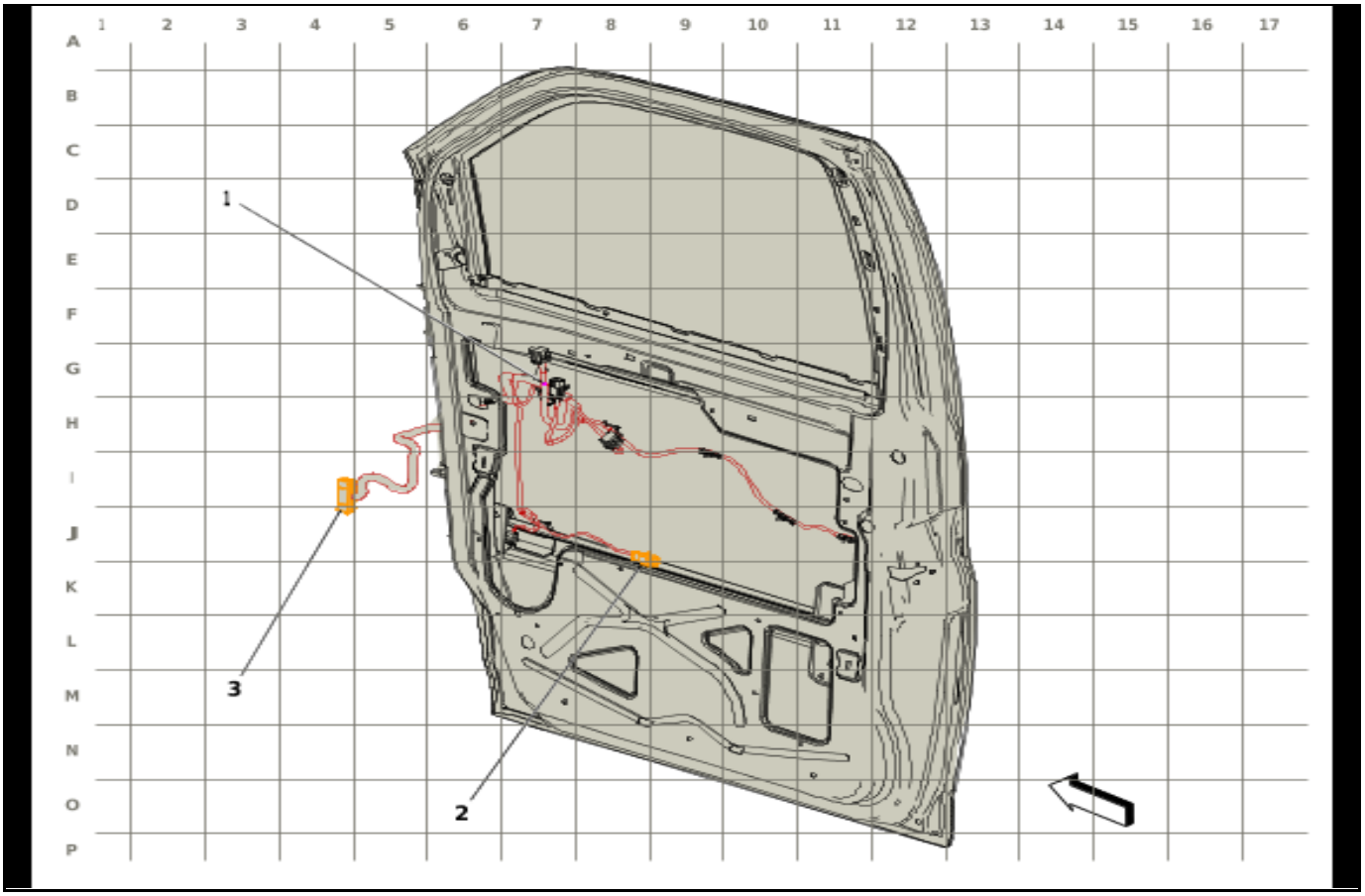
(1) J500 Driver Door Wiring Harness (AU3/ DE5/A31)

(2) J502 Driver Door Wiring Harness (DE5)

(3) X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness

(4) X501 Airbag Wiring Harness to Front Side Door Door Wiring Harness - Driver (ASF)

Harness Routing Views (Door Harness Routing - Passenger Door)



6003055

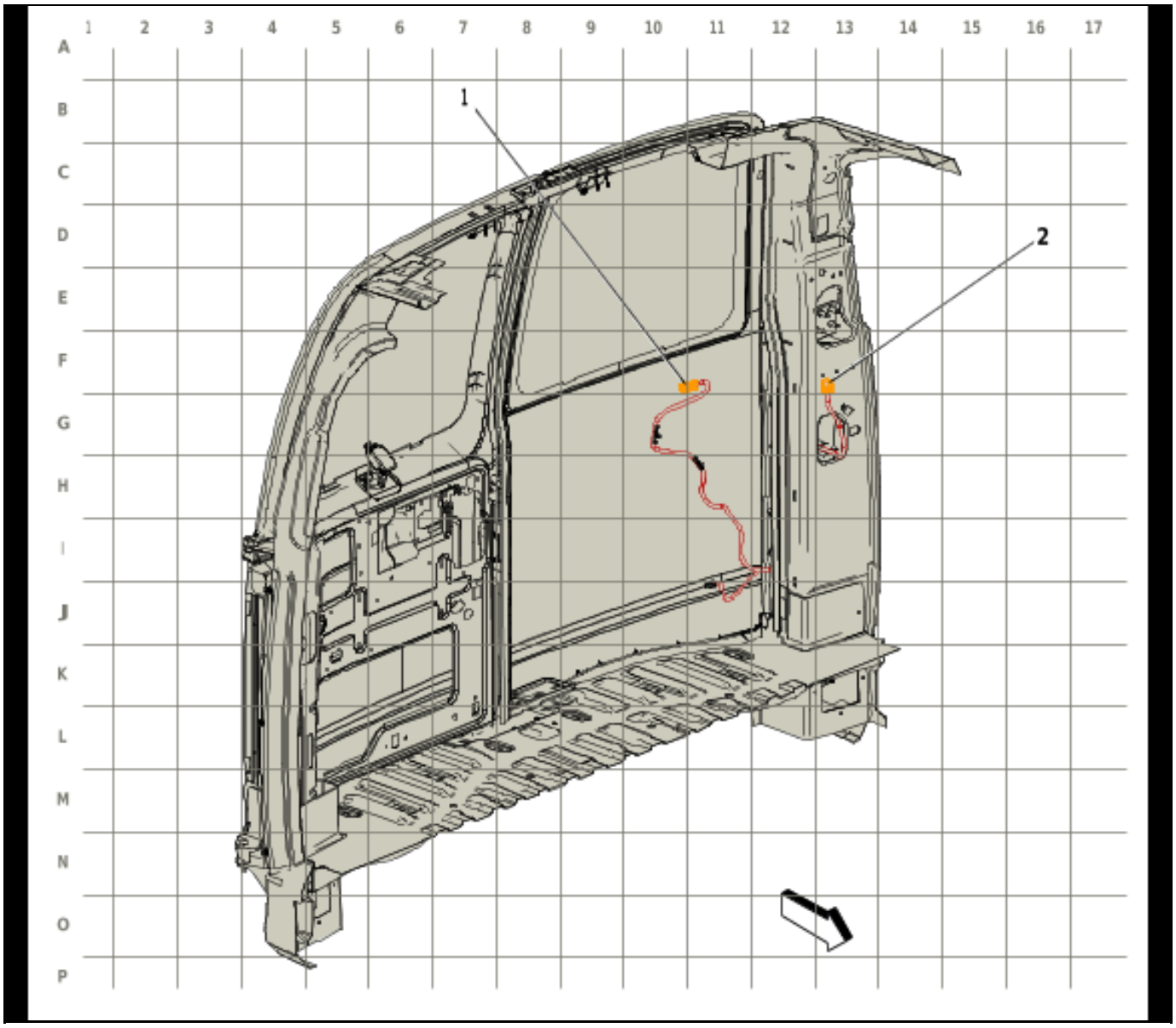
Items

(1) J600 Passenger Door Wiring Harness (AU3/ DE5/A31)

(2) X601 Side Impact Sensor - Right Front Jumper Wiring Harness to Front Side Door Door Wiring Harness - Pas (ASF)

(3) X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness

Harness Routing Views (Door Harness Routing - Driver Rear (Passenger or Cargo))



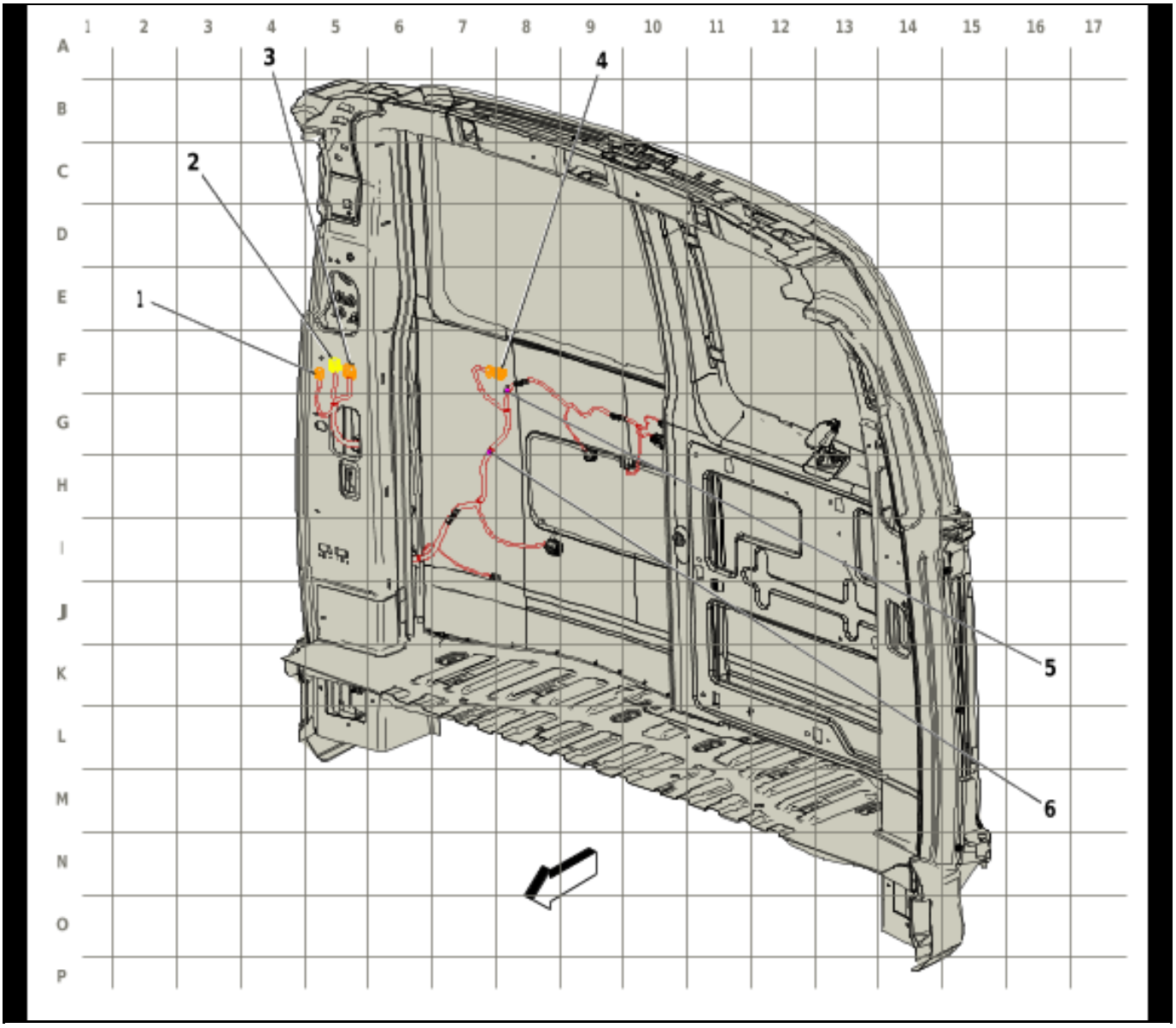
6003056

Items

(1) X901 Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness - Left (C49)

(2) X411 Rear Door Door Wiring Harness - Left to Body Wiring Harness (Passenger/Cargo)

Harness Routing Views (Door Harness Routing - Passenger Rear (Passenger or Cargo))



6003057

Items

(1) X403 Rear Door Door Wiring Harness to Body Wiring Harness (UVC)

(2) X400 Rear Door Door Wiring Harness to Body Wiring Harness (Passenger/Cargo)

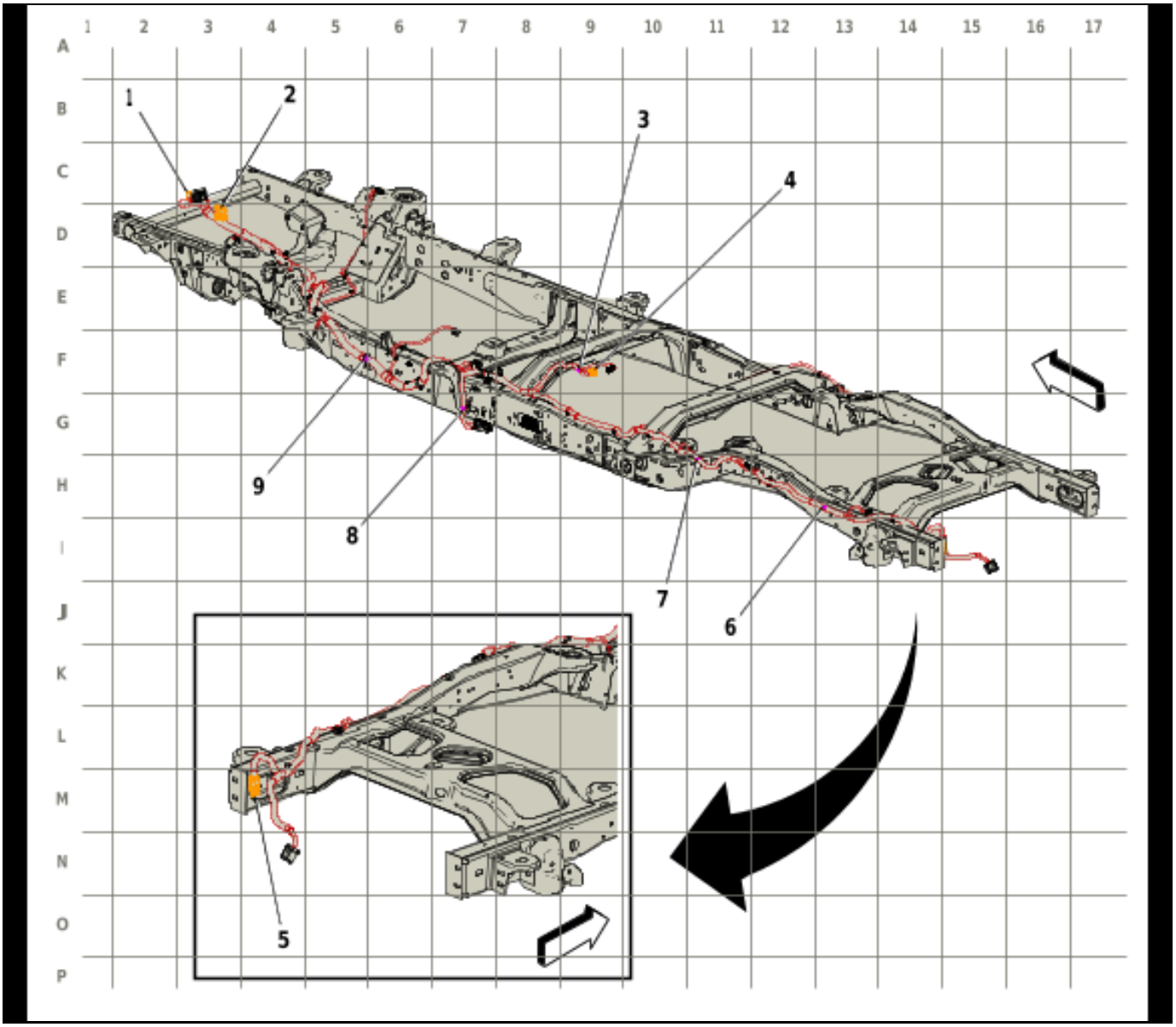
(3) X412 Rear Door Door Wiring Harness to Body Wiring Harness (Passenger/Cargo)

(4) X902 Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness (C49)

(5) J901 Right Rear Cargo Door Wiring Harness (Cargo/Passenger with AU3)

(6) J902 Right Rear Cargo Door Wiring Harness (Cargo/Passenger with C49)

Harness Routing Views (Chassis Harness Routing - Underbody (Passenger or Cargo with SWB))



5985298

Items

(1) X185 Instrument Panel Wiring Harness to Chassis Wiring Harness

(2) X101 Engine Wiring Harness to Chassis Wiring Harness

(3) J432 Chassis Wiring Harness

(4) X102 Chassis Wiring Harness to Fuel Tank Wiring Harness

(5) X408 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness (UD7/UFT)

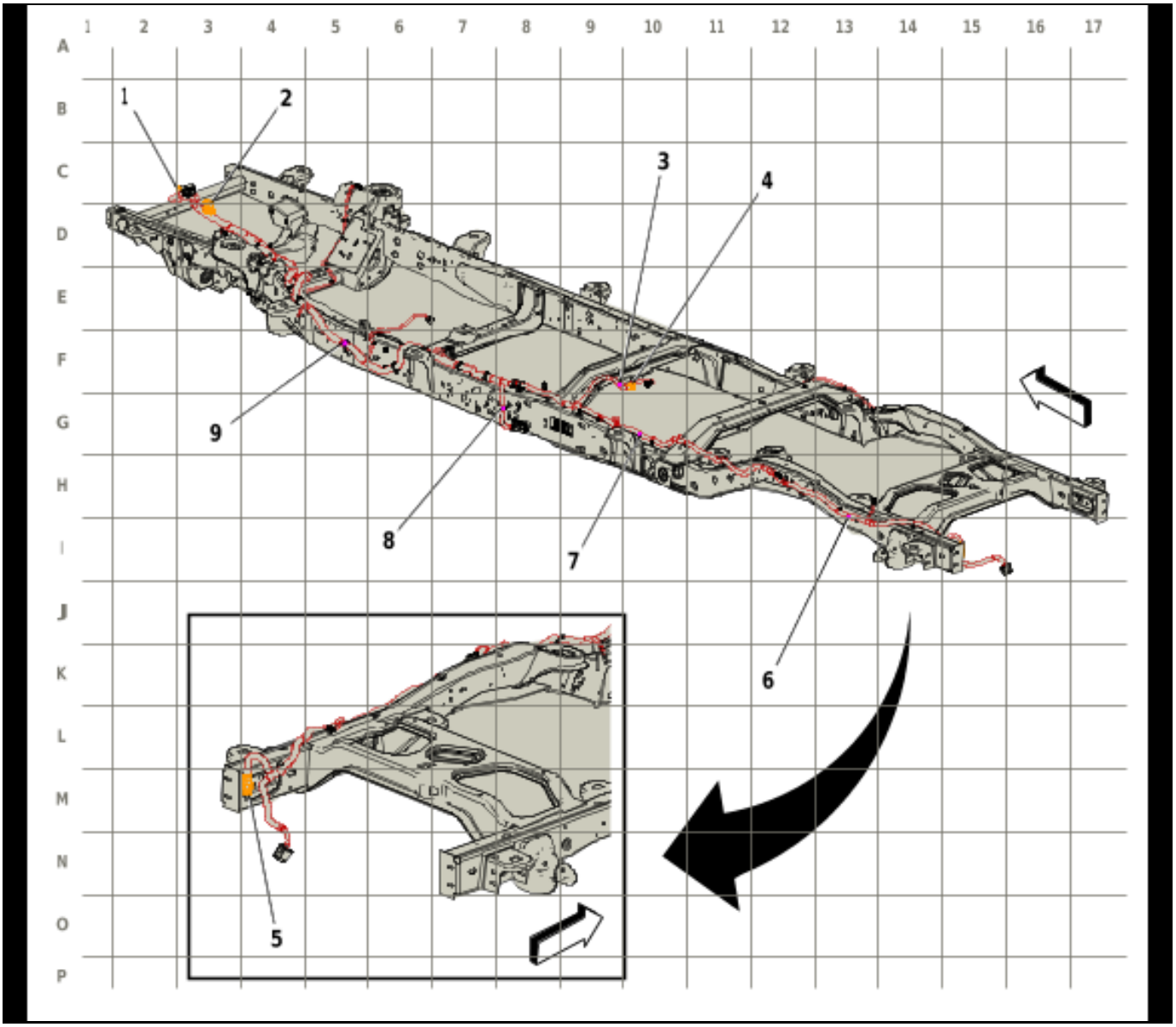
(6) J404 Chassis Wiring Harness

(7) J402 Chassis Wiring Harness

(8) J431 Chassis Wiring Harness

(9) J315 Chassis Wiring Harness

Harness Routing Views (Chassis Harness Routing - Underbody (Passenger or Cargo with LWB))



5985299

Items

(1) X185 Instrument Panel Wiring Harness to Chassis Wiring Harness

(2) X101 Engine Wiring Harness to Chassis Wiring Harness

(3) J432 Chassis Wiring Harness

(4) X102 Chassis Wiring Harness to Fuel Tank Wiring Harness

(5) X408 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness (UD7/UFT)

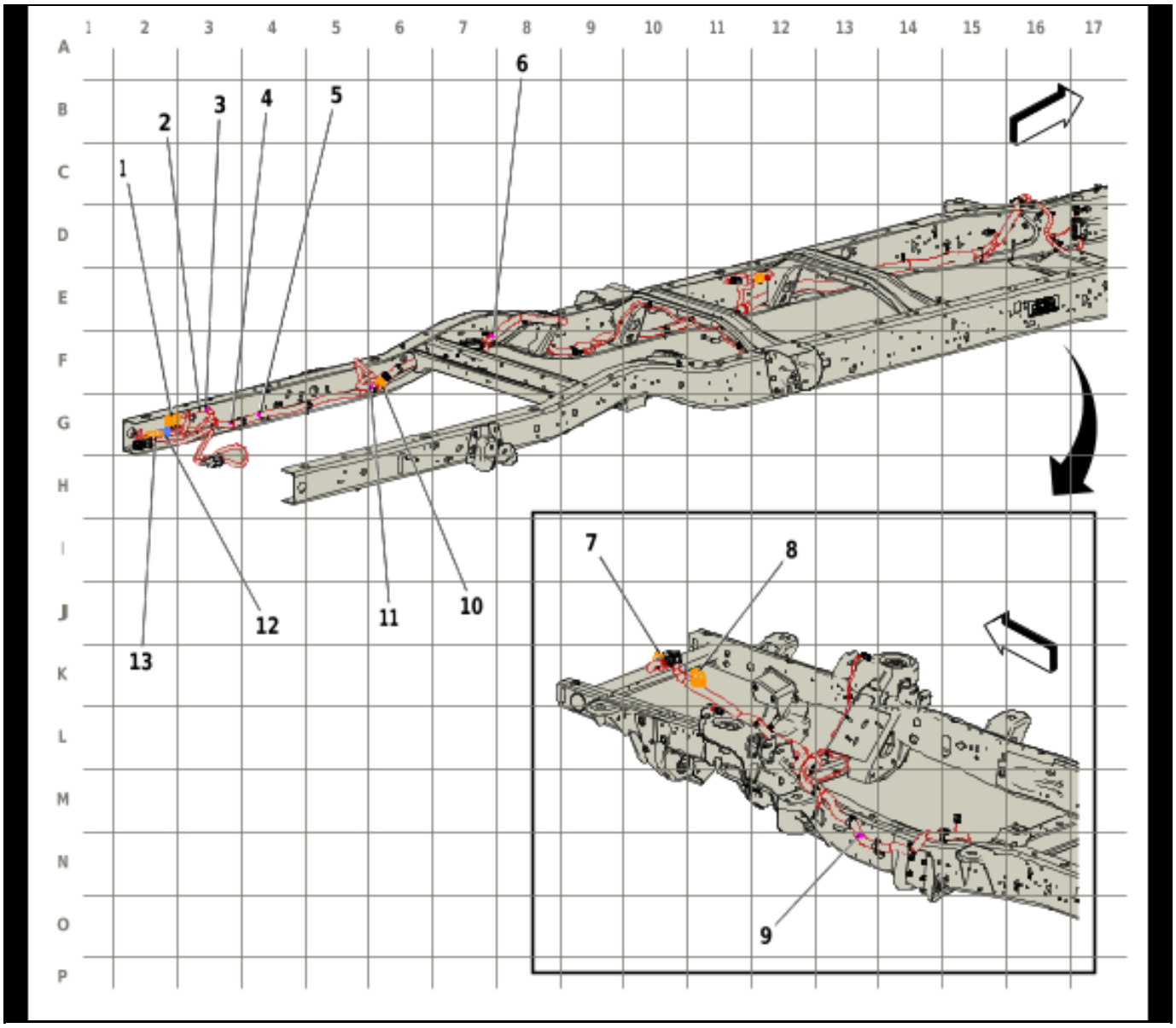
(6) J404 Chassis Wiring Harness

(7) J402 Chassis Wiring Harness

(8) J431 Chassis Wiring Harness

(9) J315 Chassis Wiring Harness

Harness Routing Views (Chassis Harness Routing - Underbody (Cutaway) (NE7))

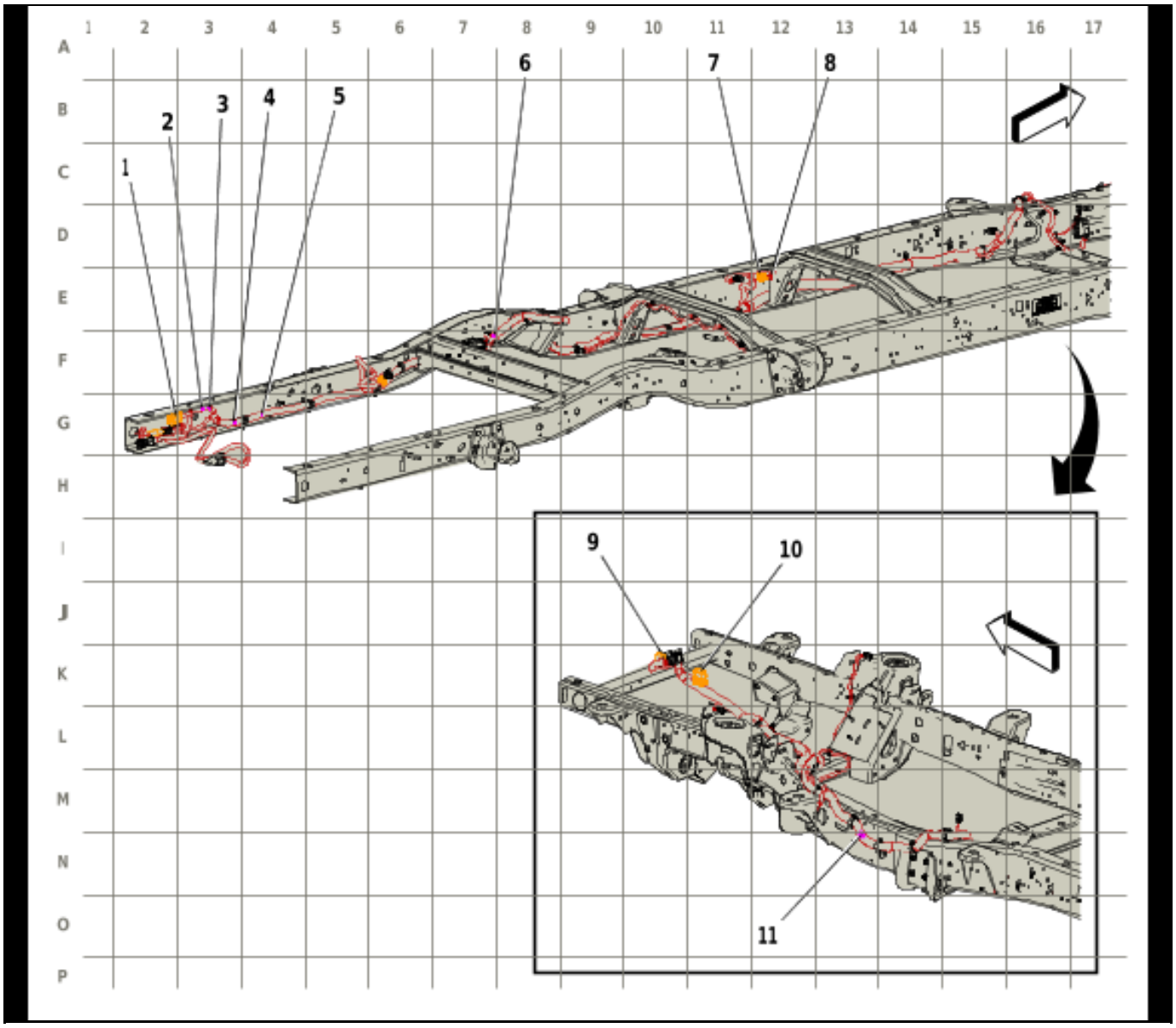


5985300

Items

(1) X405 Chassis Wiring Harness to Chassis Wiring Harness (Cutaway)
(2) J387 Chassis Wiring Harness (Cutaway)
(3) J388 Chassis Wiring Harness (Cutaway)
(4) J404 Chassis Wiring Harness
(5) J402 Chassis Wiring Harness
(6) J431 Chassis Wiring Harness
(7) X185 Instrument Panel Wiring Harness to Chassis Wiring Harness
(8) X101 Engine Wiring Harness to Chassis Wiring Harness
(9) J315 Chassis Wiring Harness
(10) X102 Chassis Wiring Harness to Fuel Tank Wiring Harness
(11) J432 Chassis Wiring Harness
(12) W8 Blunt Cut - Trailer Provision (UY7)
(13) X460 Chassis Wiring Harness to Chassis Wiring Harness (Cutaway with UY7 and NE7)

Harness Routing Views (Chassis Harness Routing - Underbody (Cutaway) (-NE7))

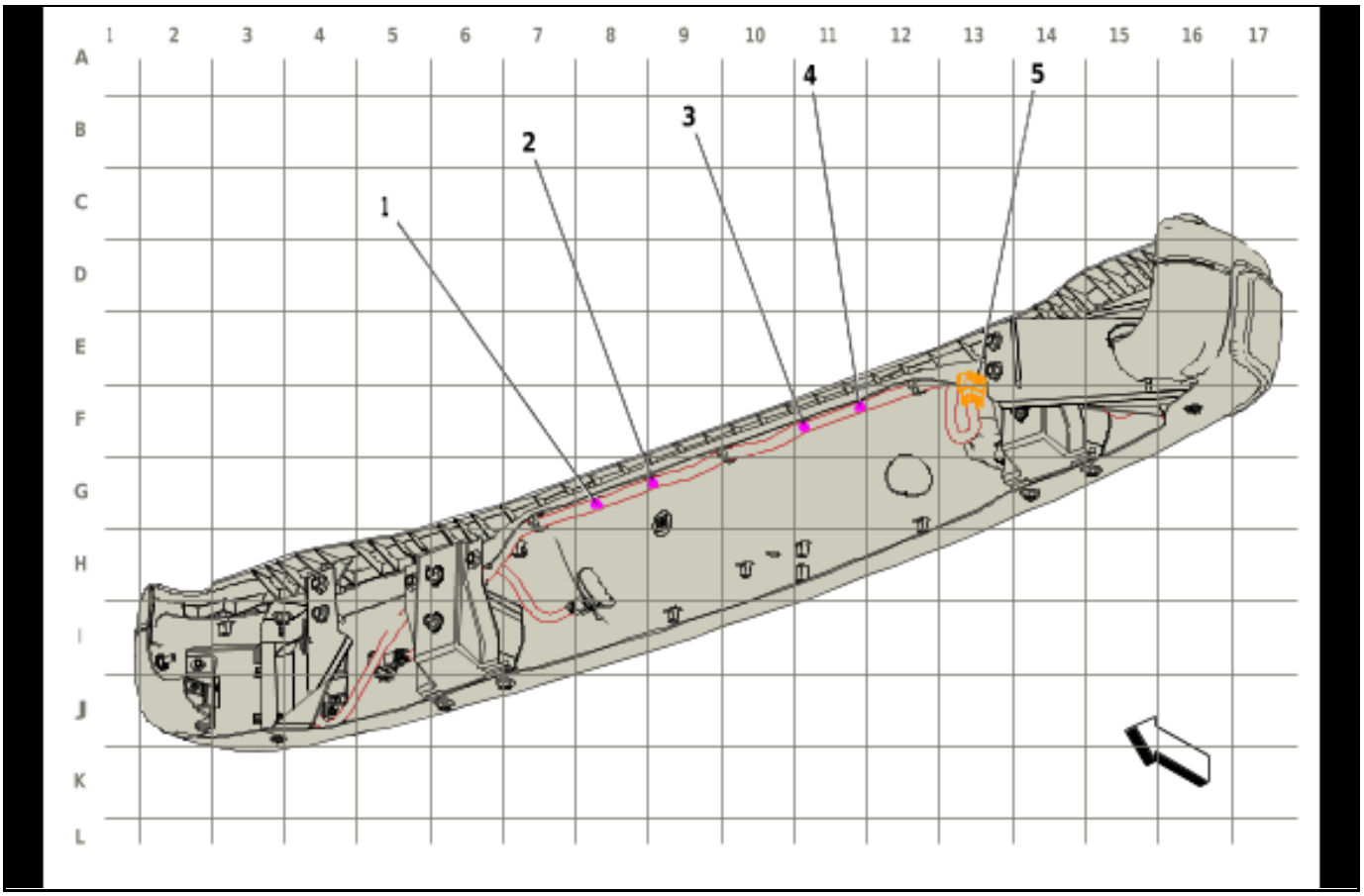


5985301

Items

(1) X405 Chassis Wiring Harness to Chassis Wiring Harness (Cutaway)
(2) J387 Chassis Wiring Harness (Cutaway)
(3) J388 Chassis Wiring Harness (Cutaway)
(4) J404 Chassis Wiring Harness
(5) J402 Chassis Wiring Harness
(6) J431 Chassis Wiring Harness
(7) X102 Chassis Wiring Harness to Fuel Tank Wiring Harness
(8) J432 Chassis Wiring Harness
(9) X185 Instrument Panel Wiring Harness to Chassis Wiring Harness
(10) X101 Engine Wiring Harness to Chassis Wiring Harness
(11) J315 Chassis Wiring Harness

Harness Routing Views (Rear Bumper Harness Routing)



6003058

Items

(1) J425 Parking Aid Jumper Wiring Harness (UFT)

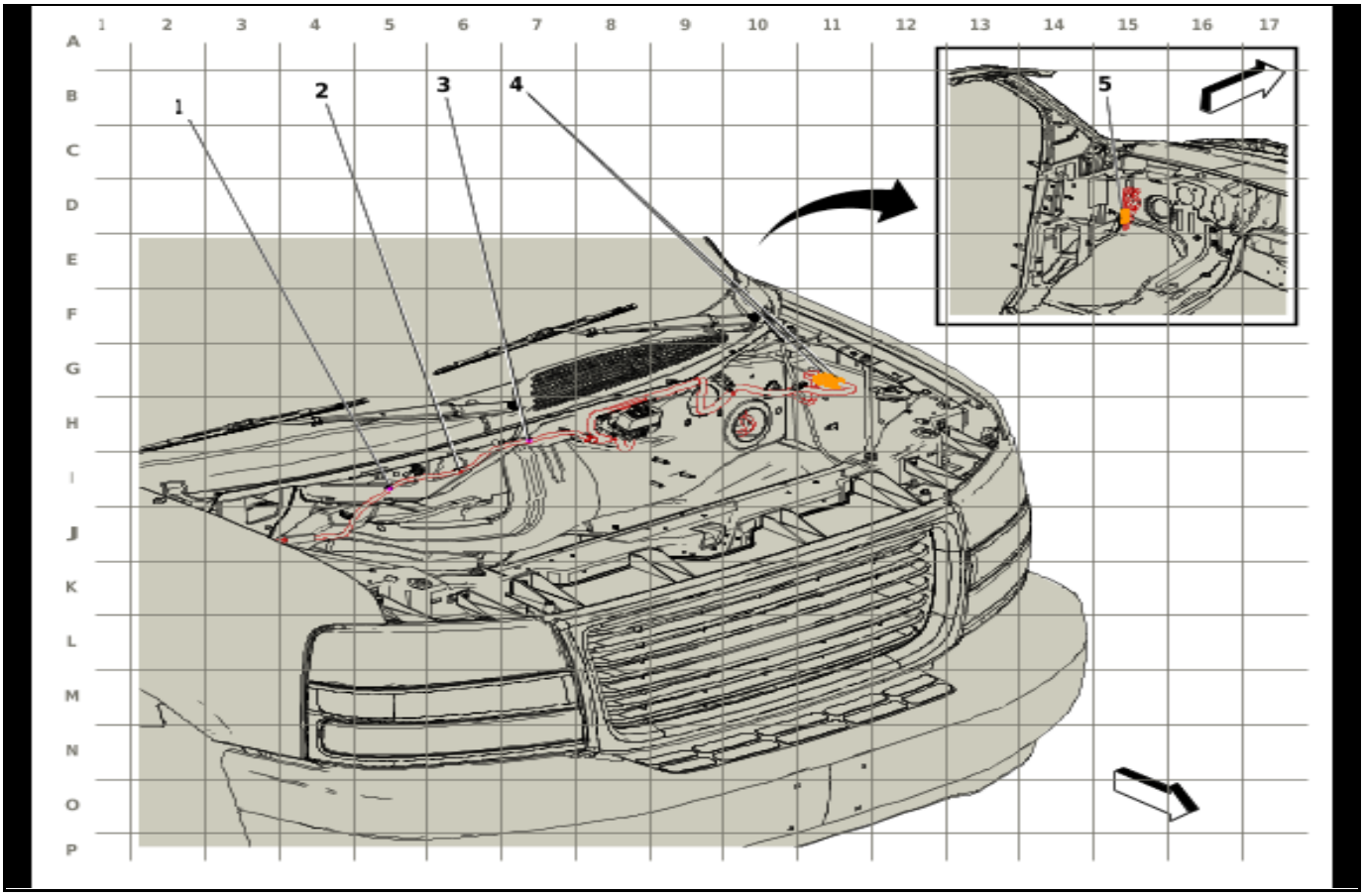
(2) J426 Parking Aid Jumper Wiring Harness (UFT)

(3) J420 Rear Bumper Wiring Harness (UD7)

(4) J421 Rear Bumper Wiring Harness (UD7)

(5) X408 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness (UD7/UFT)

Harness Routing Views (Upfitter Provision Harness Routing - Engine Compartment (9L7))



6003060

Items

(1) J104 Fuse Block Jumper Wiring Harness (9L7)

(2) J105 Fuse Block Jumper Wiring Harness (9L7)

(3) J106 Fuse Block Jumper Wiring Harness (9L7)

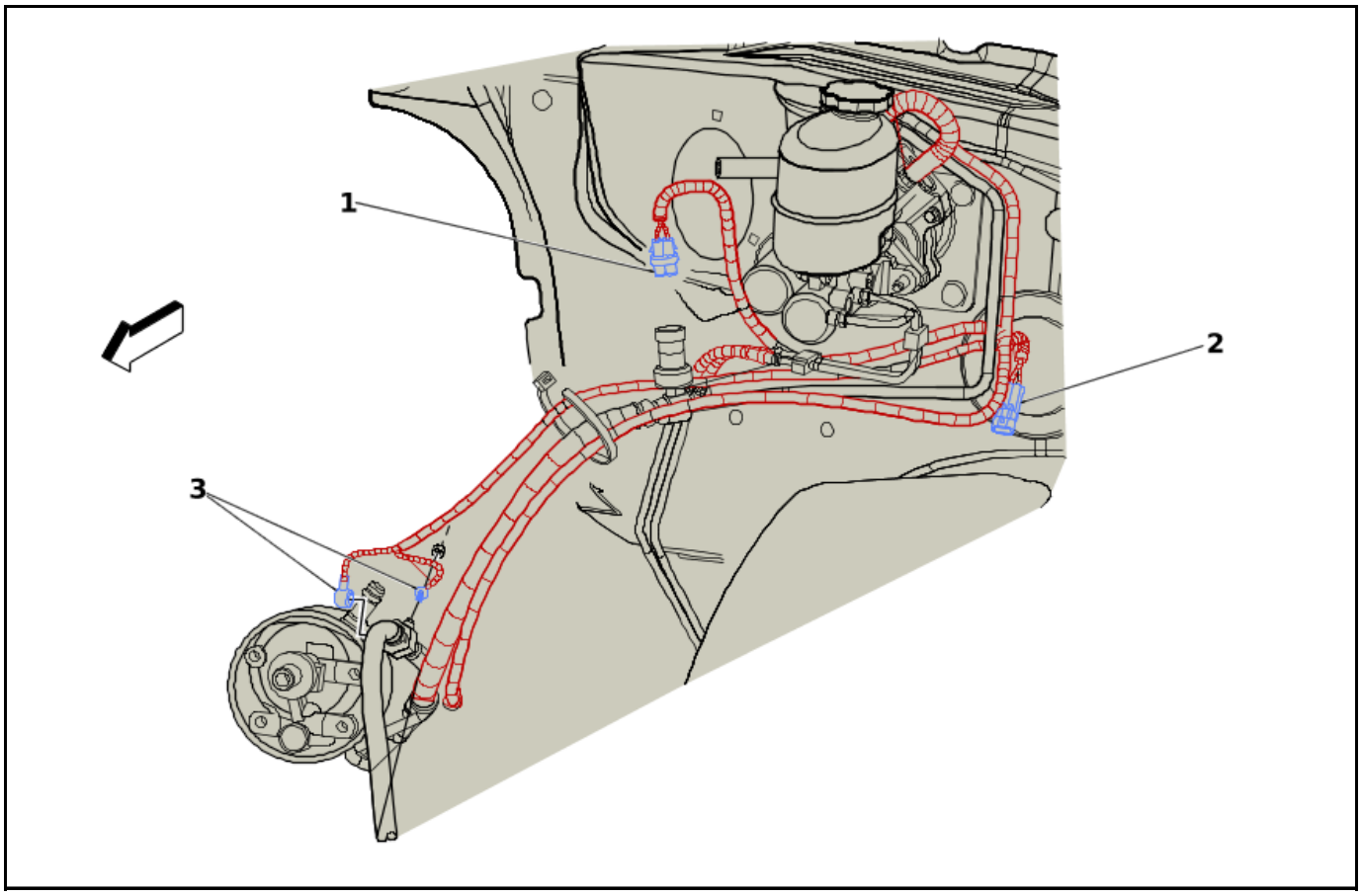
(4) X190 Accessory Wiring Harness to Accessory Power Fuse Block Rear Wiring Harness Extension Harness

(5) X291 Accessory Power Fuse Block Rear Wiring Harness Extension Harness to Accessory Power Fuse Block Rear

Component Locator

Front of Vehicle/Engine Compartment Component Views

Brake Booster Fluid Alarm Switches (UJ1)



2831205

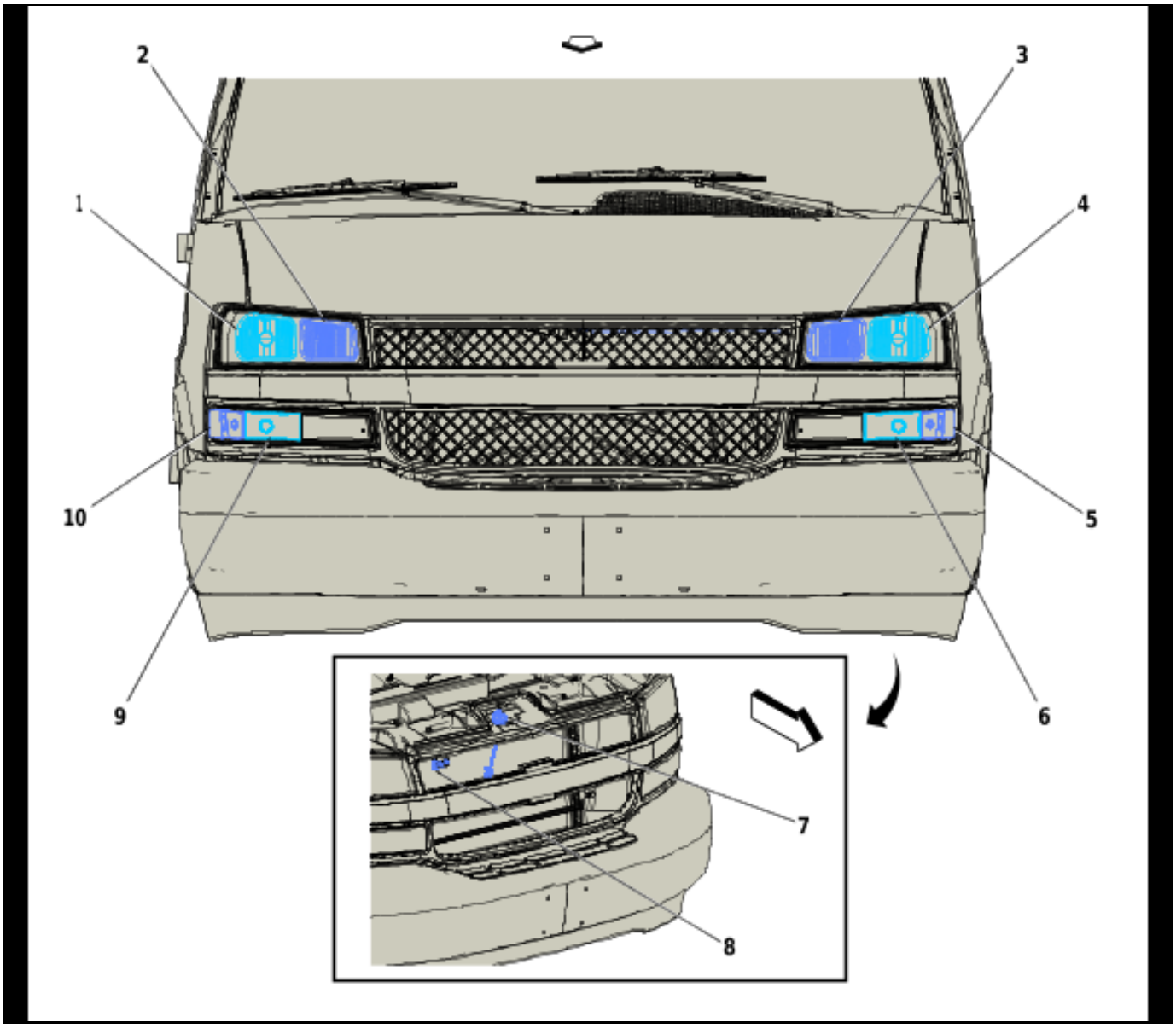
Items

(1) B19A Brake Booster Fluid Pressure Alarm Switch (UJ1)

(2) X141 Instrument Panel Wiring Harness to Brake Fluid Level Indicator Wiring Harness (UJ1)

(3) B133 Brake Booster Fluid Flow Alarm Switch (UJ1)

Front of Vehicle Components

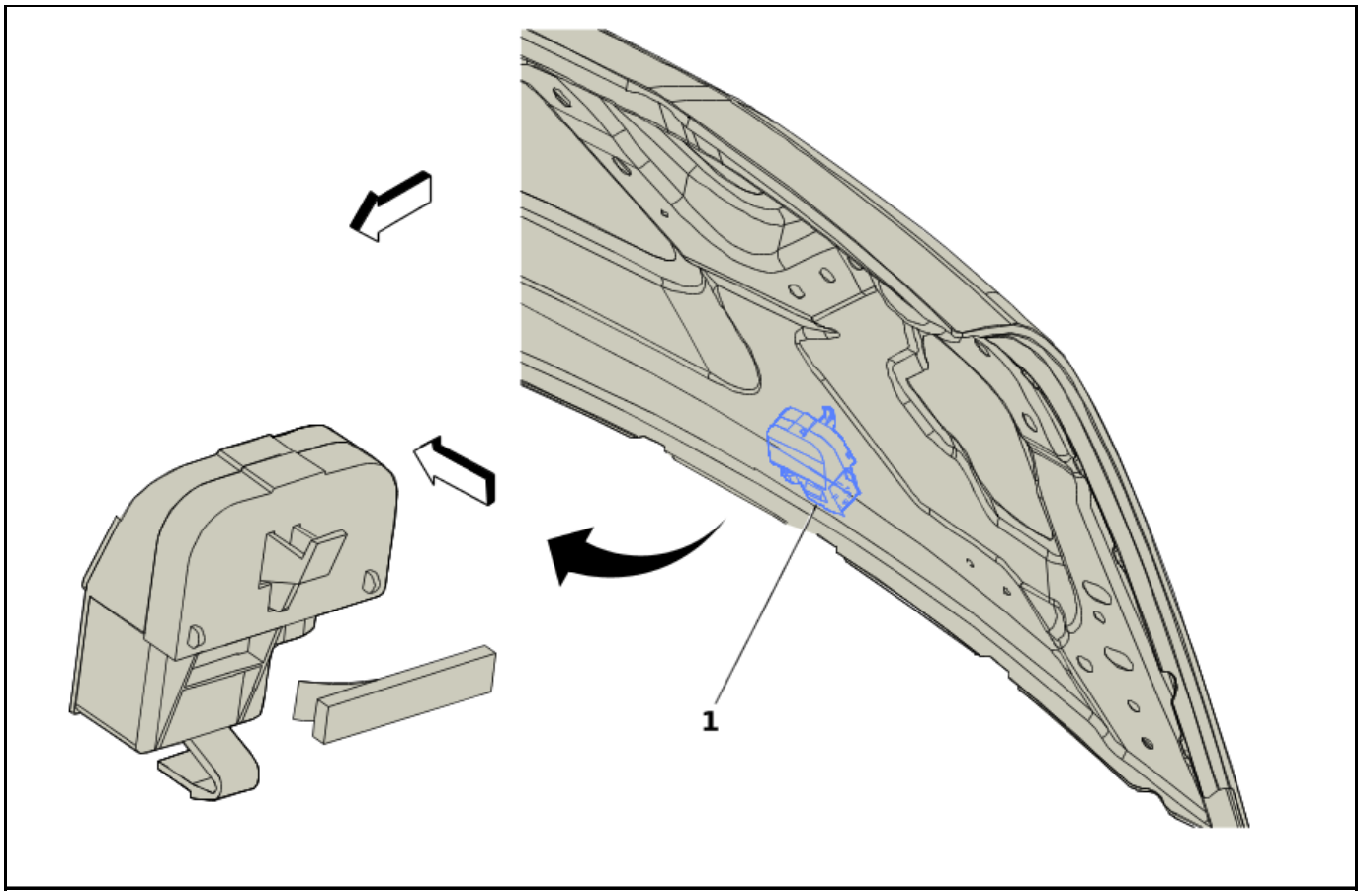


6040670

Items

(1) E4H Headlamp - Right Low Beam
(2) E4F Headlamp - Right High Beam
(3) E4E Headlamp - Left High Beam
(4) E4G Headlamp - Left Low Beam
(5) E2LF Side Marker Lamp - Left Front
(6) E4N Park/Turn Signal Lamp - Left
(7) B55 Engine Hood Switch (BTV)
(8) B9 Ambient Air Temperature Sensor
(9) E4P Park/Turn Signal Lamp - Right
(10) E2RF Side Marker Lamp - Right Front

Underside of Hood Components

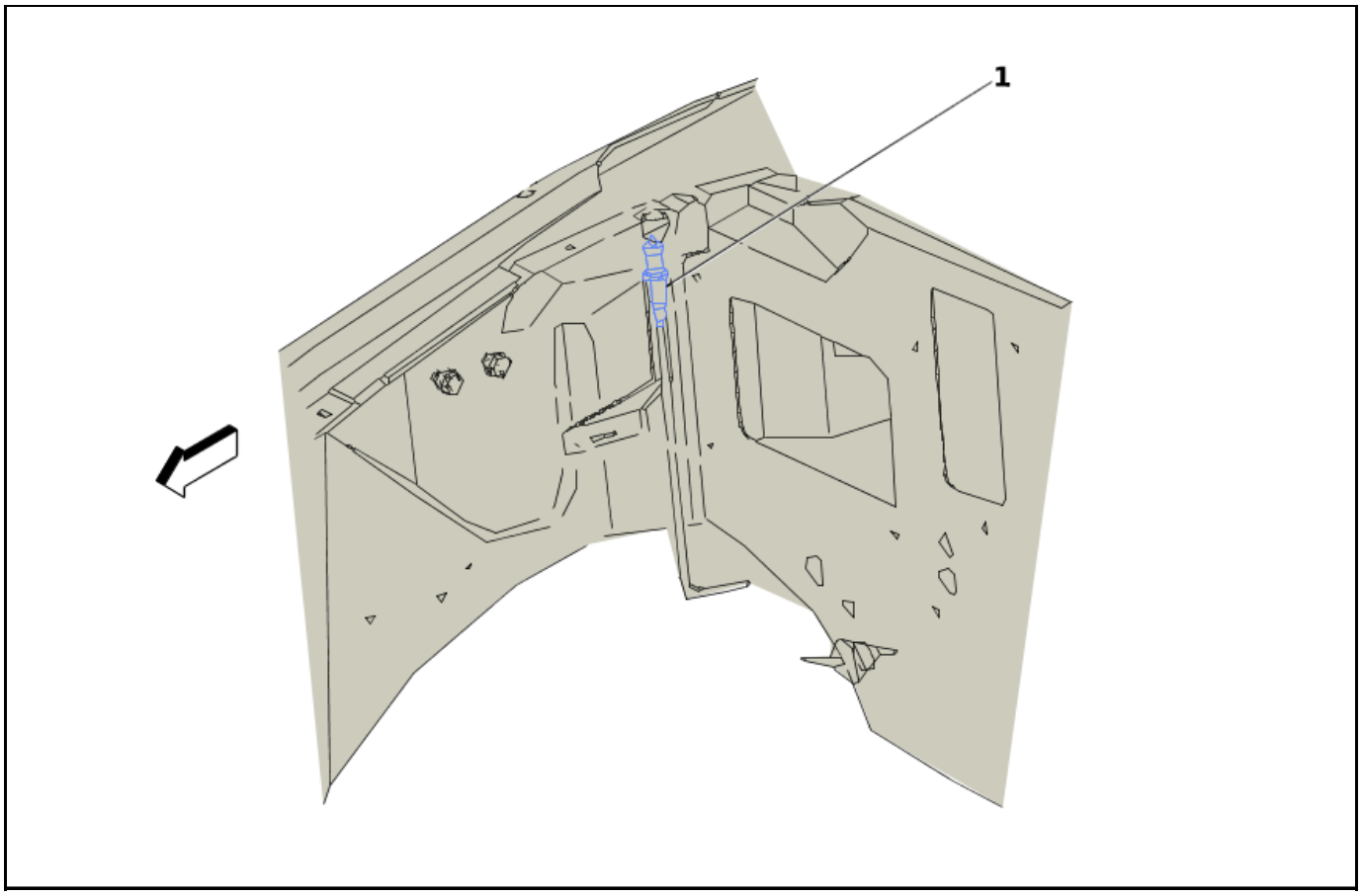


2831210

Items

(1) E22 Underhood Lamp

Right Rear of the Engine Compartment Components

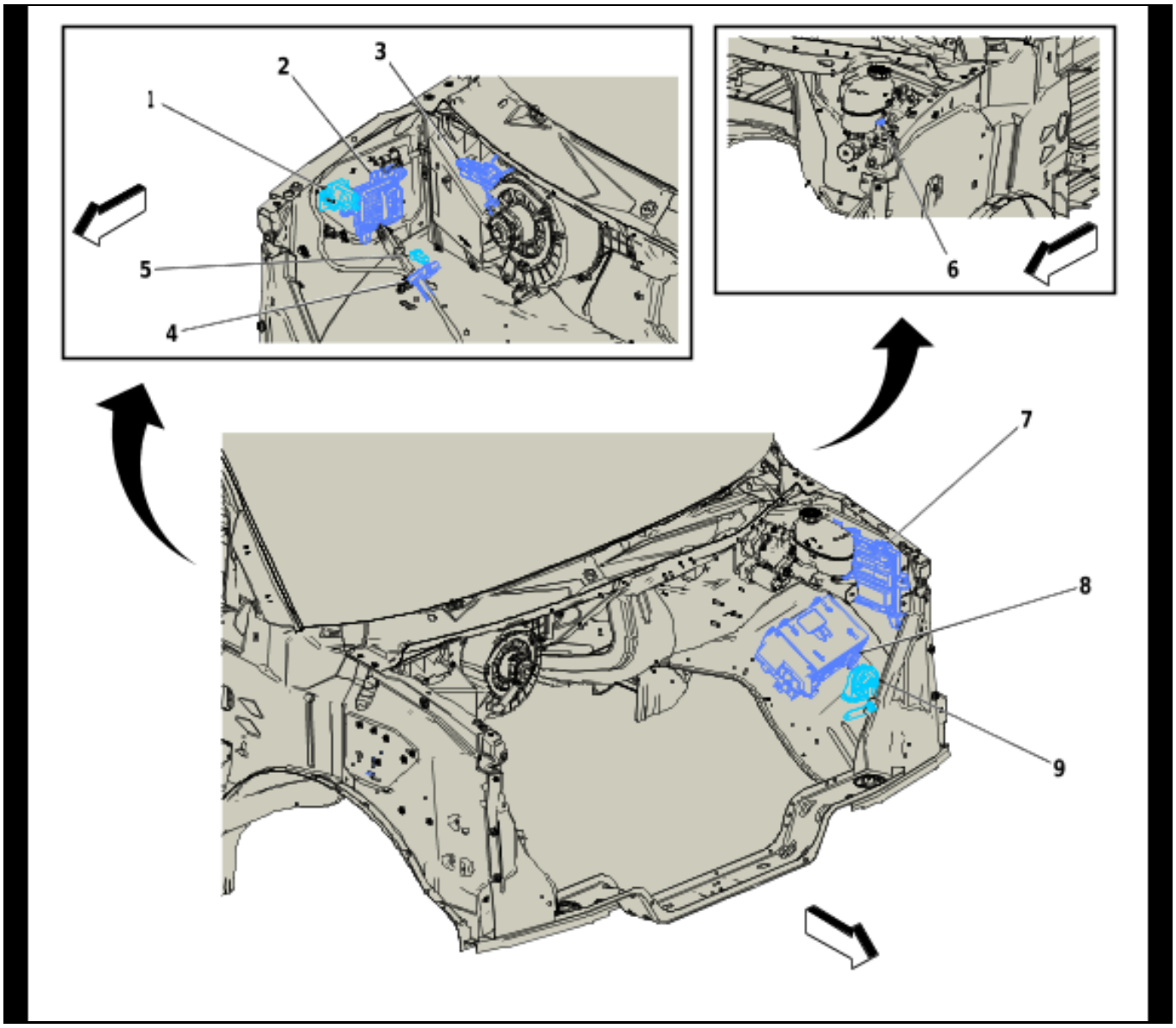


4003764

Items

(1) T4M Radio Antenna

Engine Compartment Components (1 of 2)

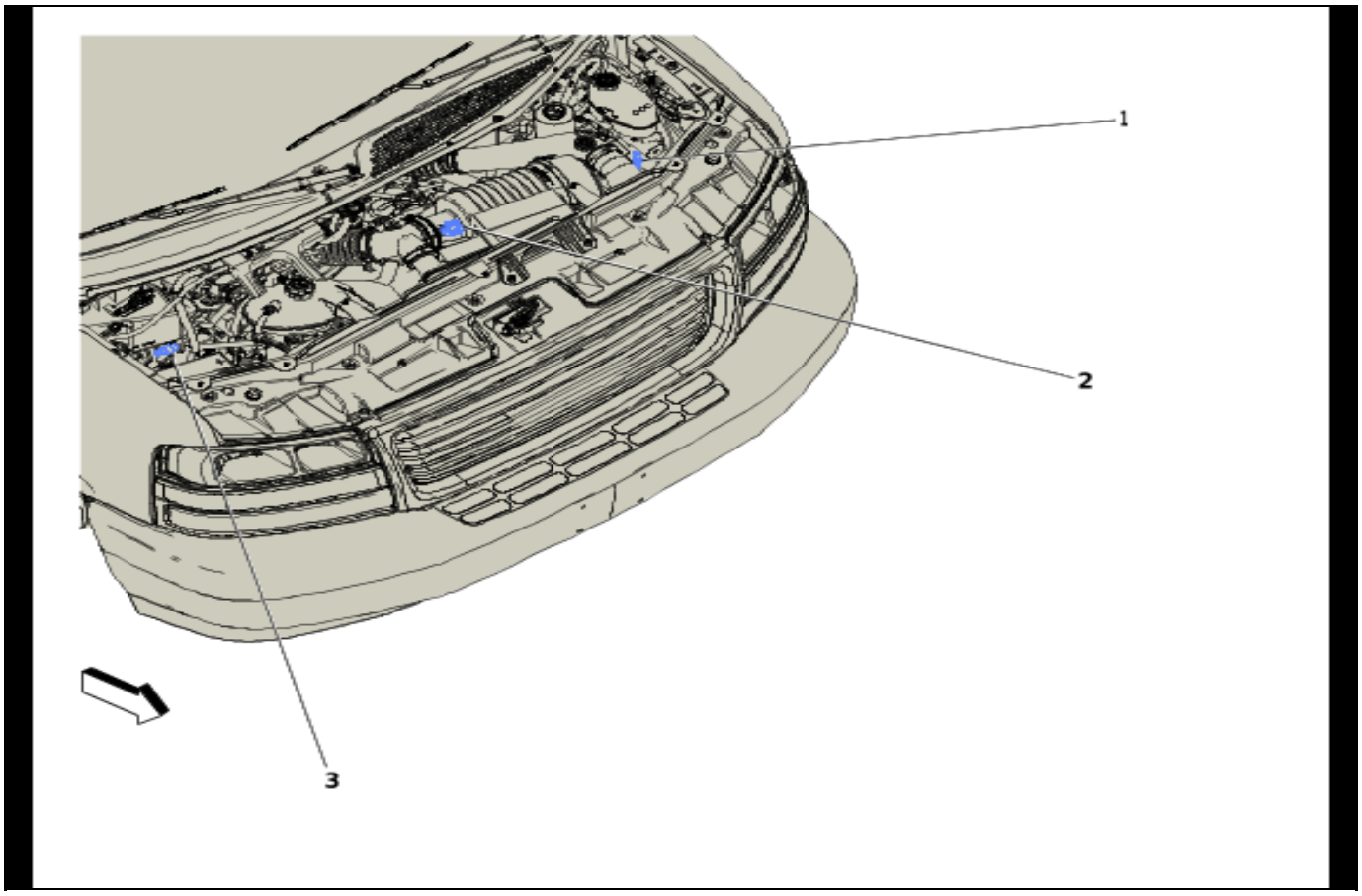


6003003

Items

(1) KR81 Auxiliary Battery Relay 1
(2) K71 Transmission Control Module (M5U)
(3) R3 Blower Motor Resistor
(4) B18 Battery Current Sensor
(5) R6A Terminating Resistor - High Speed Bus
(6) B20 Brake Fluid Level Switch
(7) M75 Windshield Wiper Motor
(8) K20 Engine Control Module
(9) X50A Fuse Block - Underhood
(10) P13 Horn Assembly

Engine Compartment Components (2 of 2)

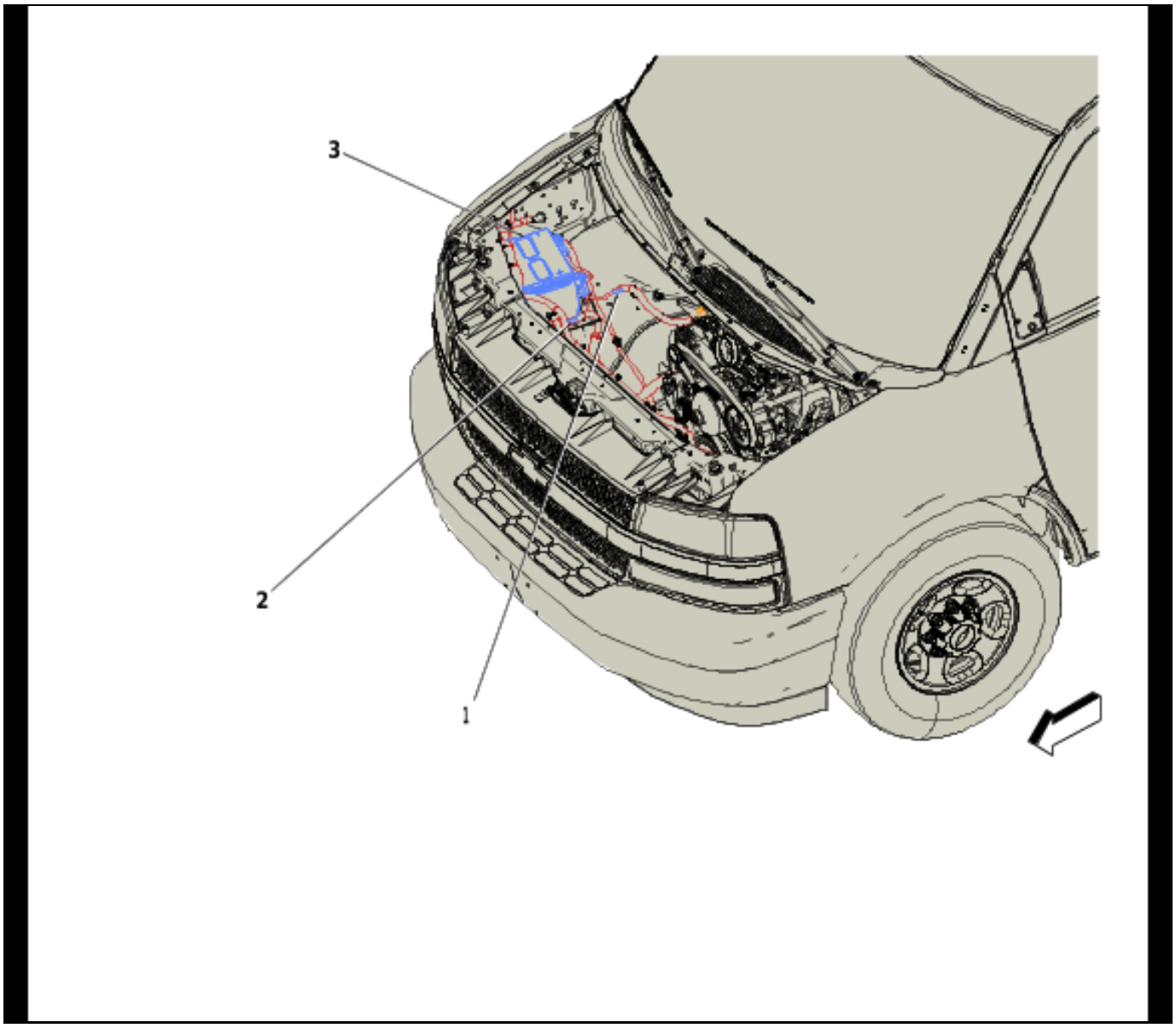


6087089

Items

(1) B1 A/C Refrigerant Pressure Sensor (C60)
(2) B75C Multifunction Intake Air Sensor
(3) B1B A/C Low Side Pressure Switch (C60)

Engine Compartment Components

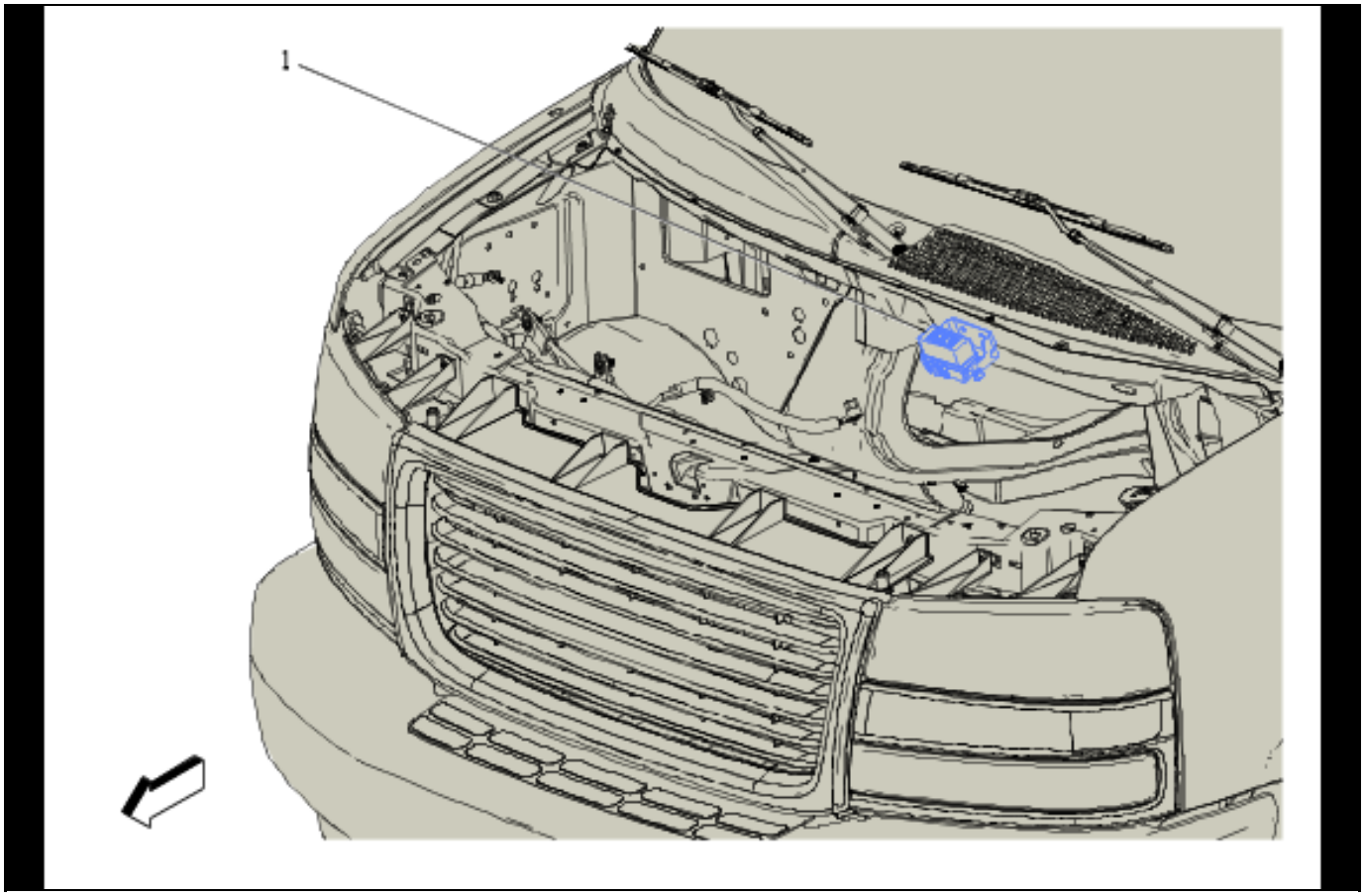


6133374

Items

(1) F104C Fusible Link 3
(2) F104B Fusible Link 2
(3) C1 Battery

Engine Compartment Components (9L7)



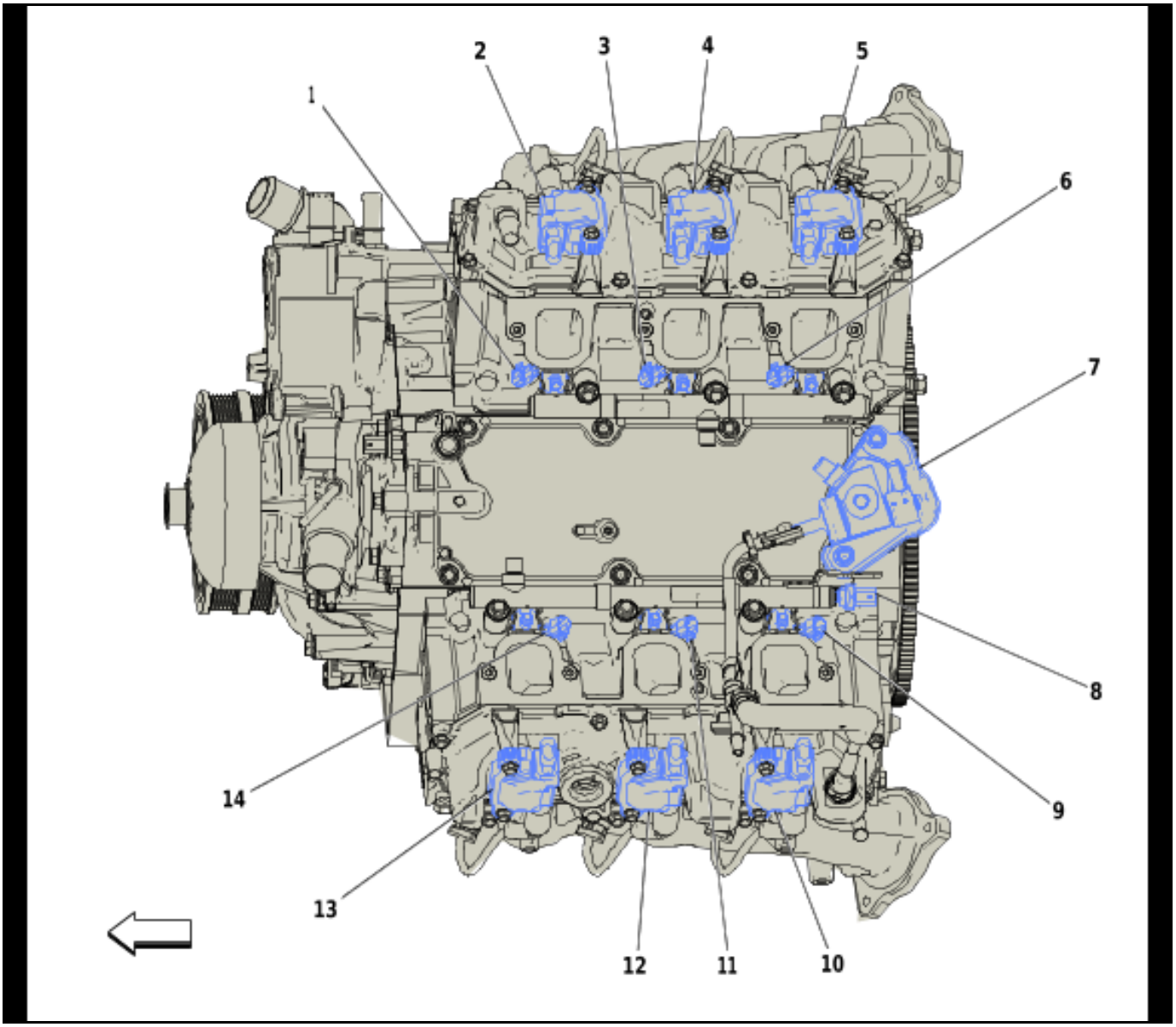
6003005

Items

(1) X50B Fuse Block - Underhood Auxiliary

Powertrain Component Views

Top of the Engine Components (LV1)

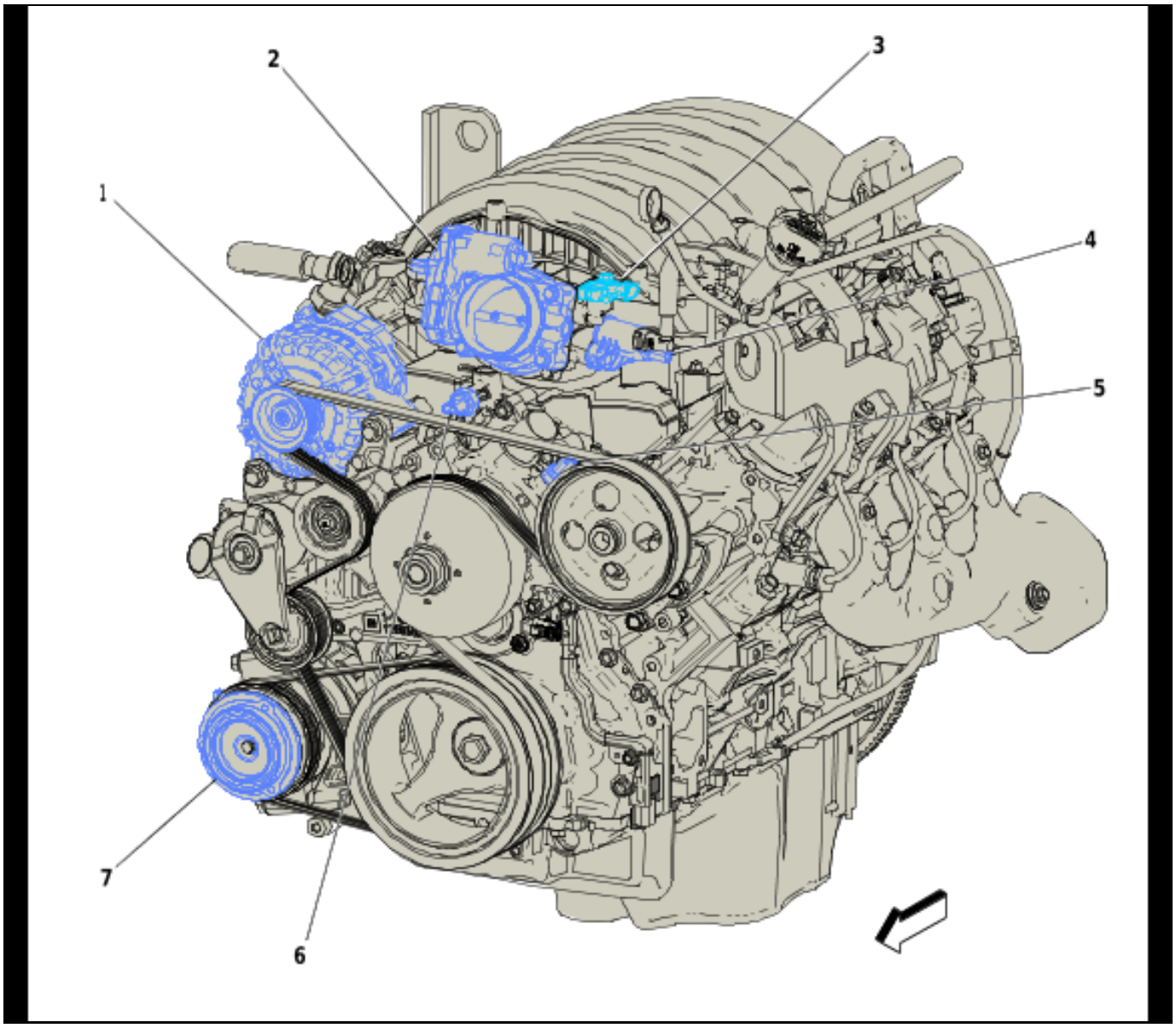


6003006

Items

(1) Q17B Fuel Injector 2
(2) T8B Ignition Coil 2
(3) Q17D Fuel Injector 4
(4) T8D Ignition Coil 4
(5) T8F Ignition Coil 6
(6) Q17F Fuel Injector 6
(7) G18 High Pressure Fuel Pump
(8) B47B Fuel Rail Pressure Sensor
(9) Q17E Fuel Injector 5
(10) T8E Ignition Coil 5
(11) Q17C Fuel Injector 3
(12) T8C Ignition Coil 3
(13) T8A Ignition Coil 1
(14) Q17A Fuel Injector 1

Front of the Engine Components (LV1)

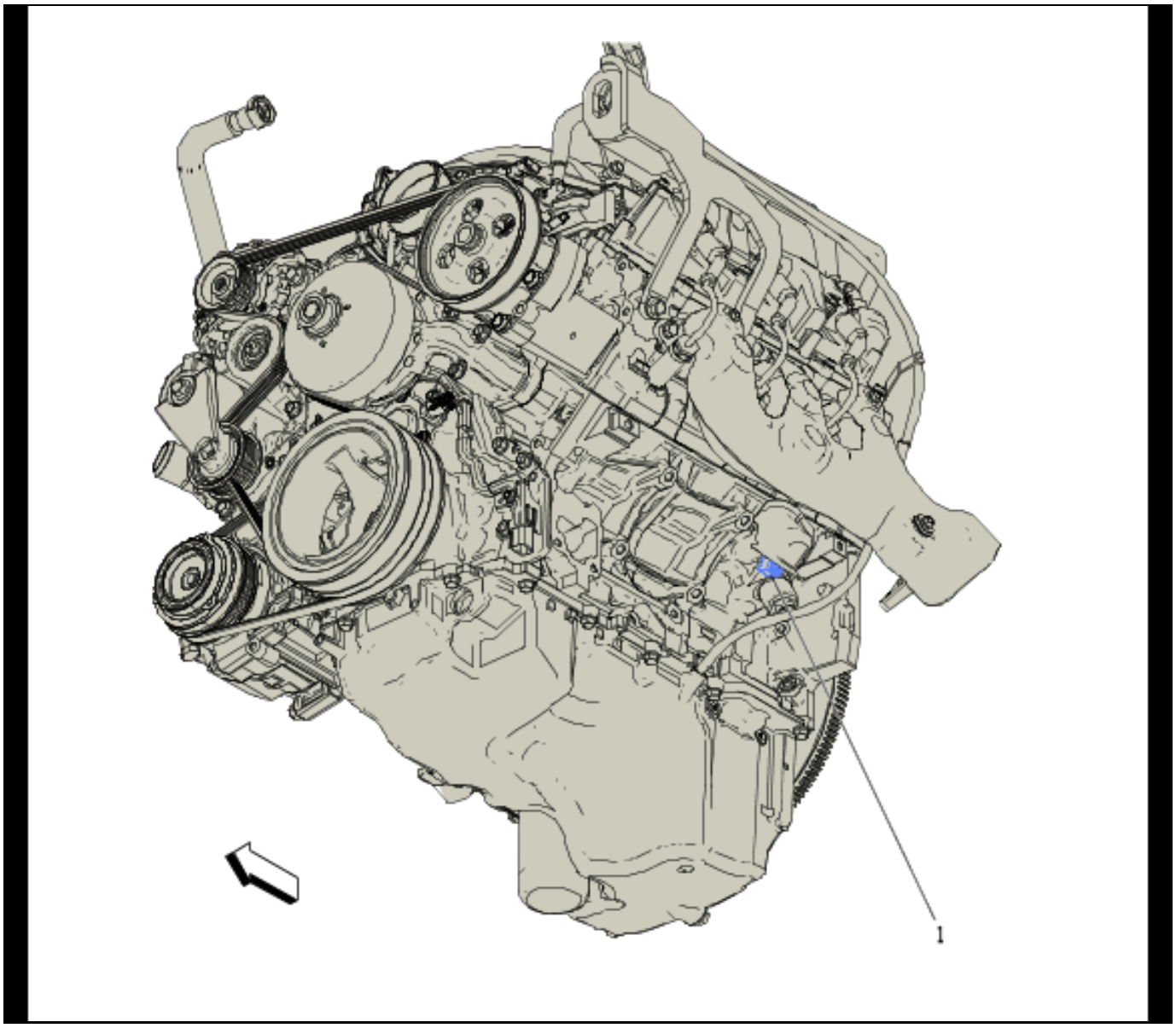


6003007

Items

(1) G13 Generator
(2) Q38 Throttle Body
(3) B74 Manifold Absolute Pressure Sensor
(4) Q12 Evaporative Emission Purge Solenoid Valve
(5) B34 Engine Coolant Temperature Sensor
(6) B37B Engine Oil Pressure Sensor
(7) Q2 A/C Compressor Clutch (C60)

Lower Right Rear of the Engine Components (LV1)

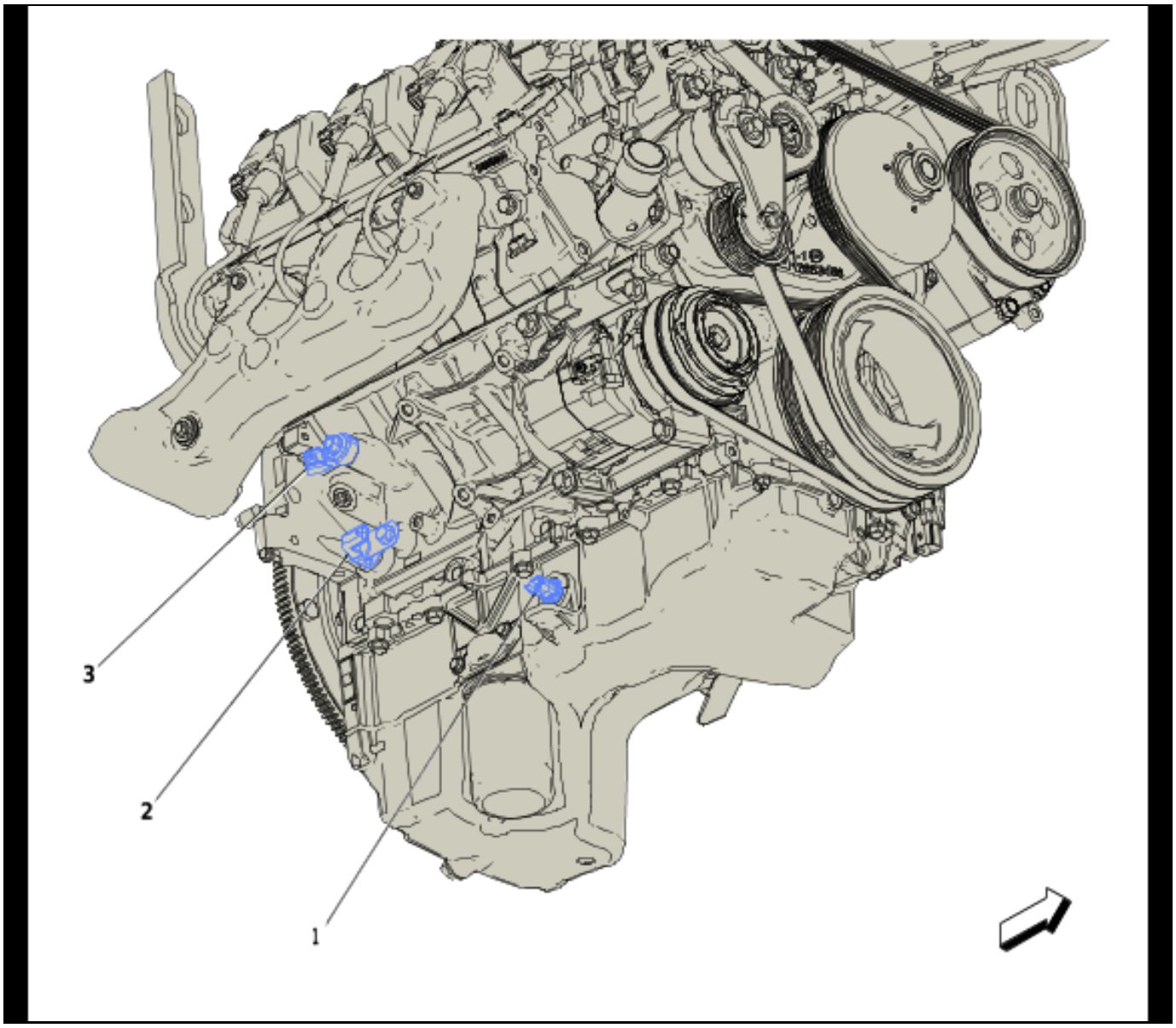


6003008

Items

(1) B68A Knock Sensor 1

Lower Left Rear of the Engine Components (LV1)

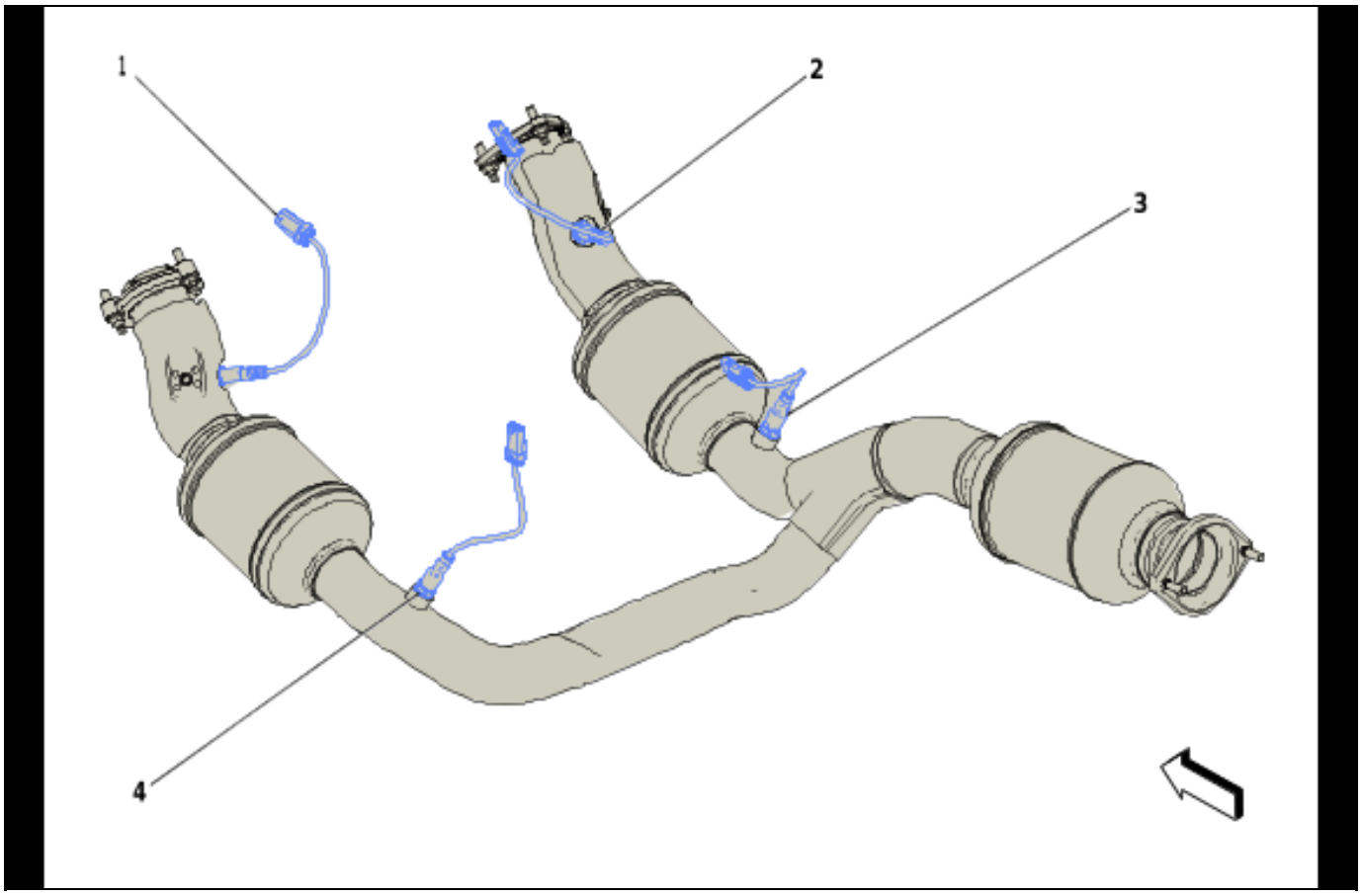


6003010

Items

(1) B35 Engine Oil Level Switch
(2) B26 Crankshaft Position Sensor
(3) B68B Knock Sensor 2

Rear of the Engine Components (LV1)



6003011

Items

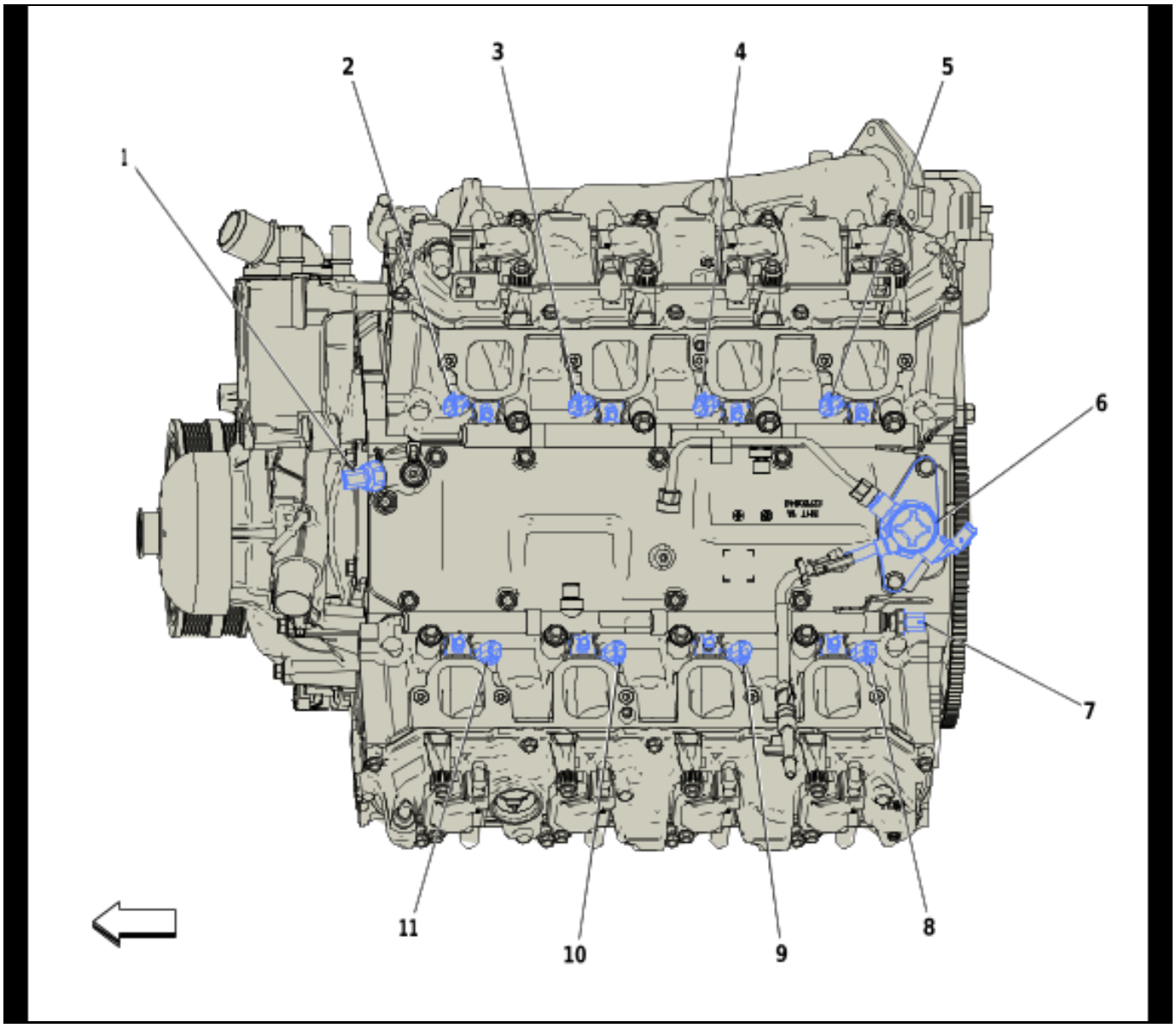
(1) B52C Heated Oxygen Sensor - Bank 1 Sensor 1

(2) B52E Heated Oxygen Sensor - Bank 2 Sensor 1

(3) B52F Heated Oxygen Sensor - Bank 2 Sensor 2

(4) B52D Heated Oxygen Sensor - Bank 1 Sensor 2

Top of Engine Components (L8T)

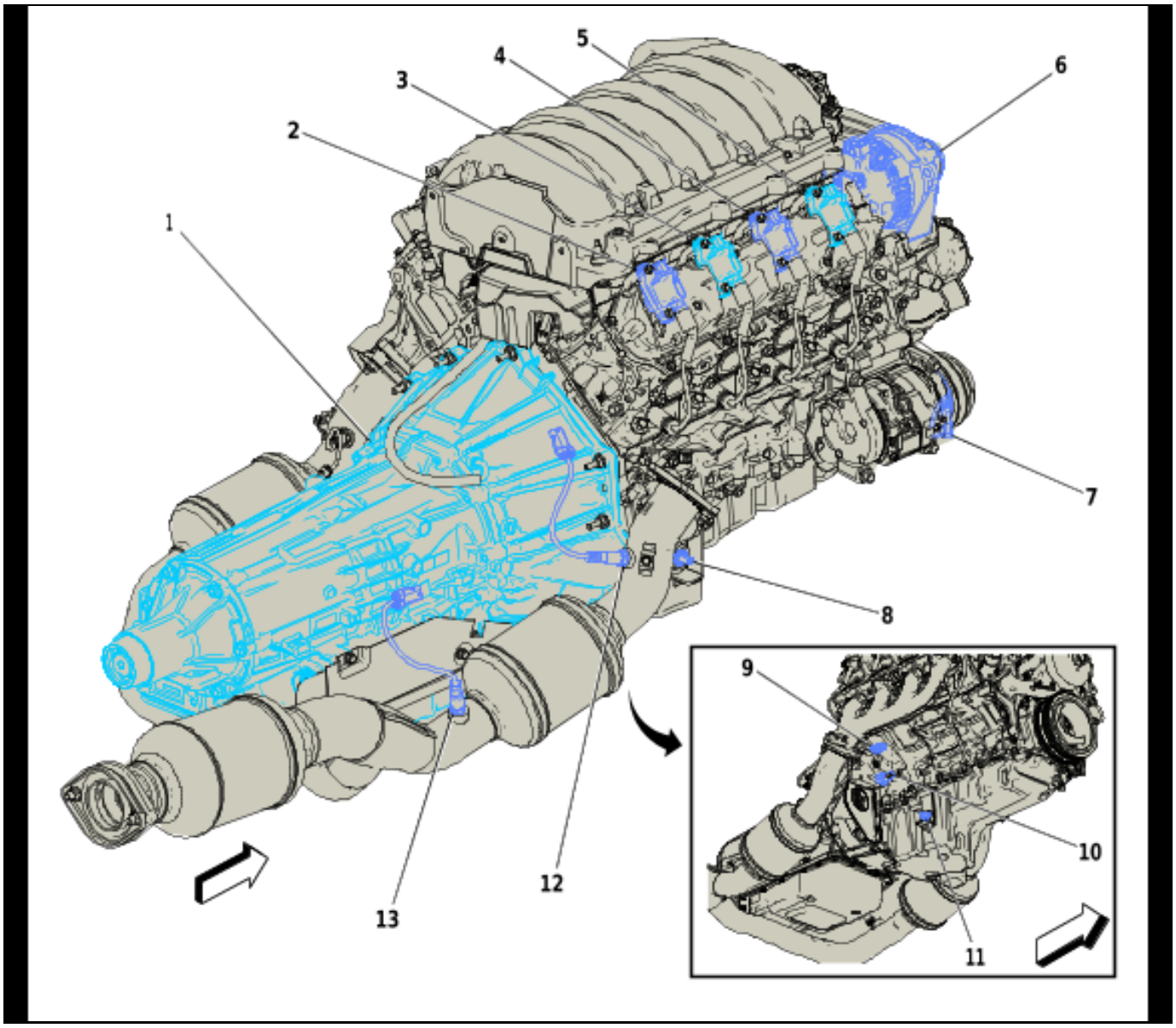


6040675

Items

(1) B37B Engine Oil Pressure Sensor
(2) Q17B Fuel Injector 2
(3) Q17D Fuel Injector 4
(4) Q17F Fuel Injector 6
(5) Q17H Fuel Injector 8 (L8T)
(6) G18 High Pressure Fuel Pump
(7) B47B Fuel Rail Pressure Sensor
(8) Q17G Fuel Injector 7 (L8T)
(9) Q17E Fuel Injector 5
(10) Q17C Fuel Injector 3
(11) Q17A Fuel Injector 1

Left Side of the Engine Components (L8T)

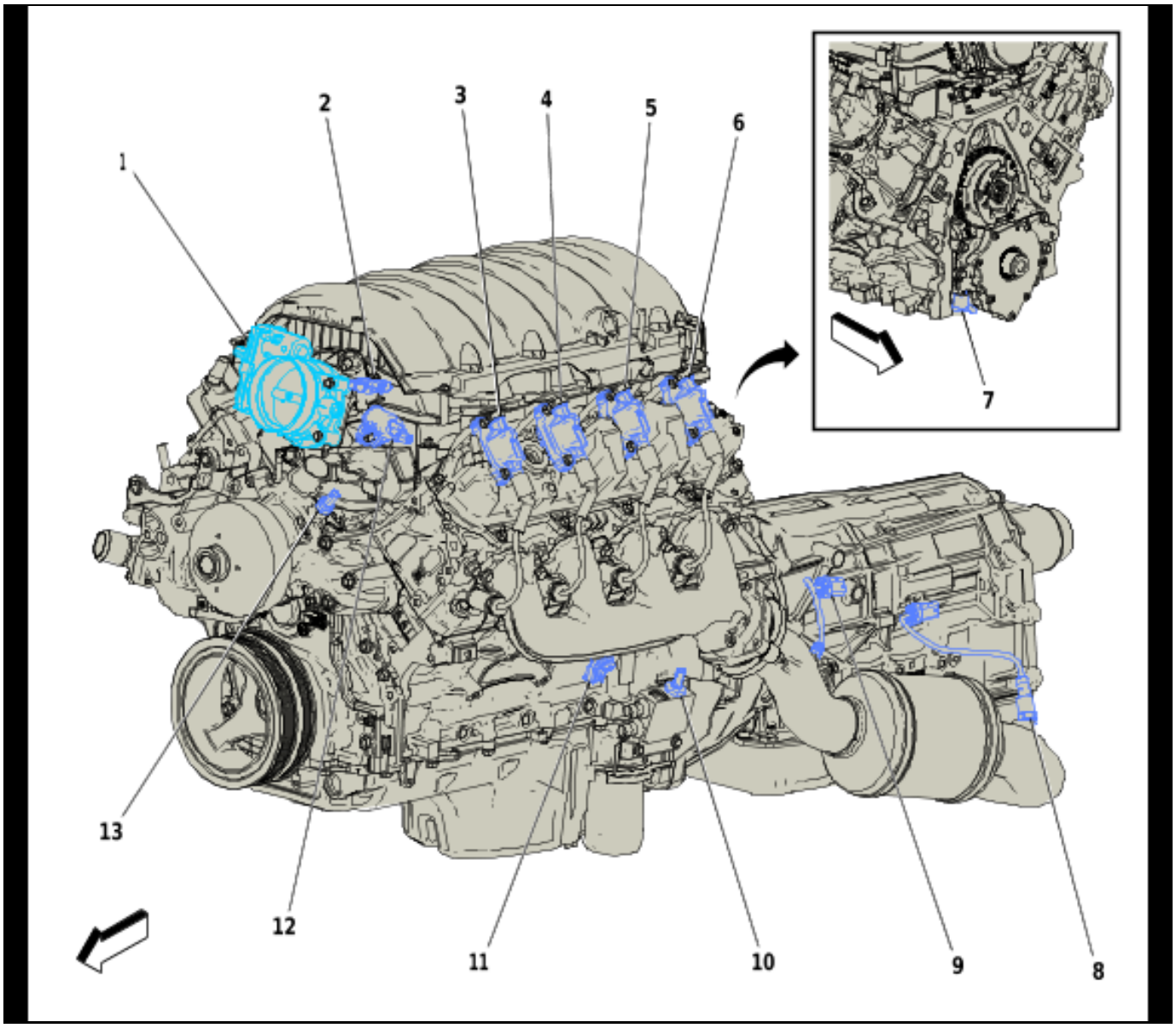


6040676

Items

(1) T12 Automatic Transmission Assembly
(2) T8H Ignition Coil 8 (L8T)
(3) T8F Ignition Coil 6
(4) T8D Ignition Coil 4
(5) T8B Ignition Coil 2
(6) G13 Generator
(7) Q2 A/C Compressor Clutch (C60)
(8) B35 Engine Oil Level Switch
(9) B68B Knock Sensor 2
(10) B26 Crankshaft Position Sensor
(11) B35 Engine Oil Level Switch
(12) B52E Heated Oxygen Sensor - Bank 2 Sensor 1
(13) B52F Heated Oxygen Sensor - Bank 2 Sensor 2

Right Side of the Engine Components (L8T)

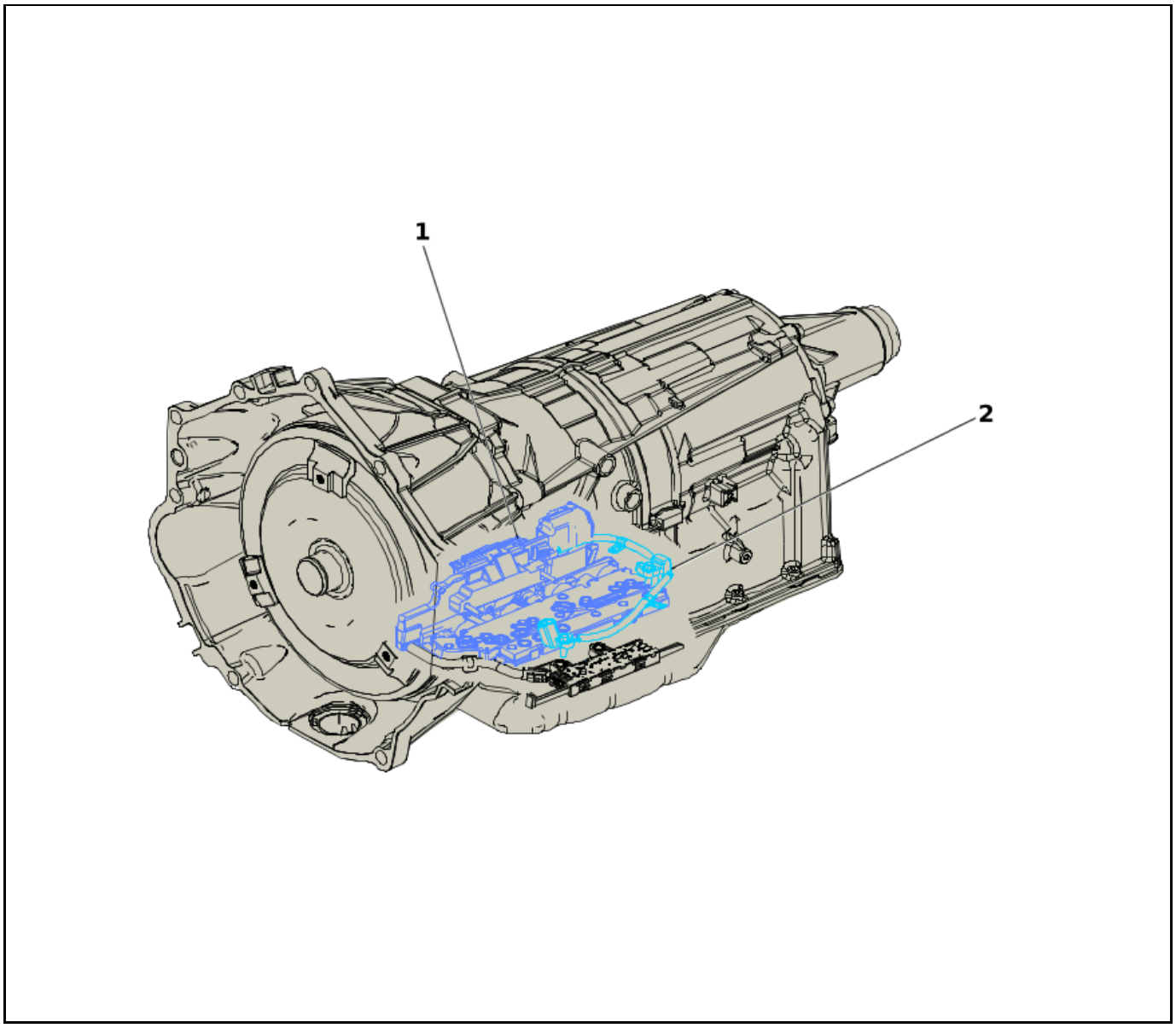


6040678

Items

(1) Q38 Throttle Body
(2) B74 Manifold Absolute Pressure Sensor
(3) T8A Ignition Coil 1
(4) T8C Ignition Coil 3
(5) T8E Ignition Coil 5
(6) T8G Ignition Coil 7 (L8T)
(7) Q44 Engine Oil Pressure Control Solenoid Valve (L8T)
(8) B52D Heated Oxygen Sensor - Bank 1 Sensor 2
(9) B52C Heated Oxygen Sensor - Bank 1 Sensor 1
(10) B36 Engine Oil Temperature Sensor (L8T)
(11) B68A Knock Sensor 1
(12) Q12 Evaporative Emission Purge Solenoid Valve
(13) B34 Engine Coolant Temperature Sensor

Automatic Transmission Internal Electrical Components



1696407

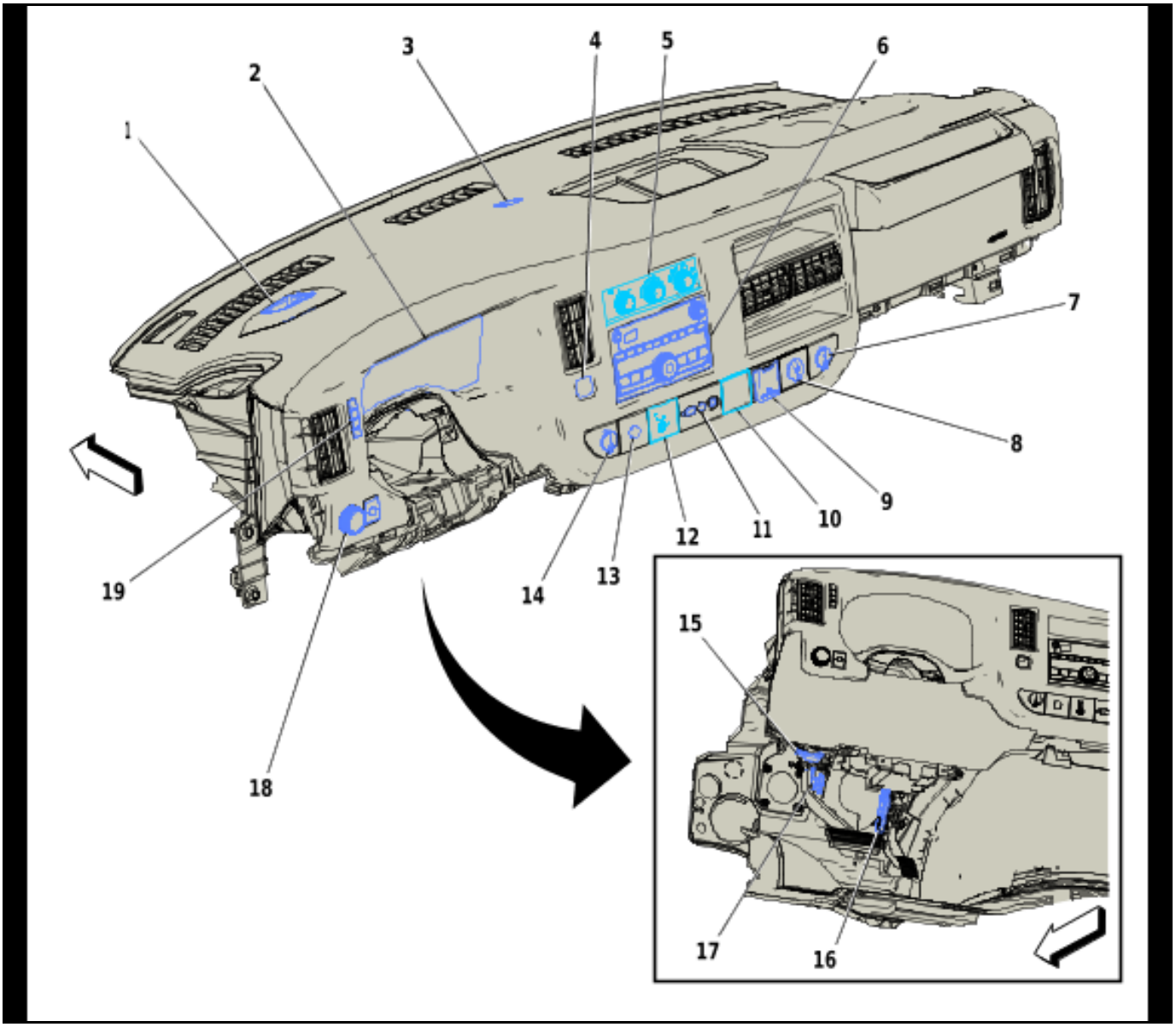
Items

(1) Q8 Control Solenoid Valve Assembly

(2) B14A Transmission Output Shaft Speed Sensor

Instrument Panel/Center Console Component Views

Instrument Panel Components (1 of 2)

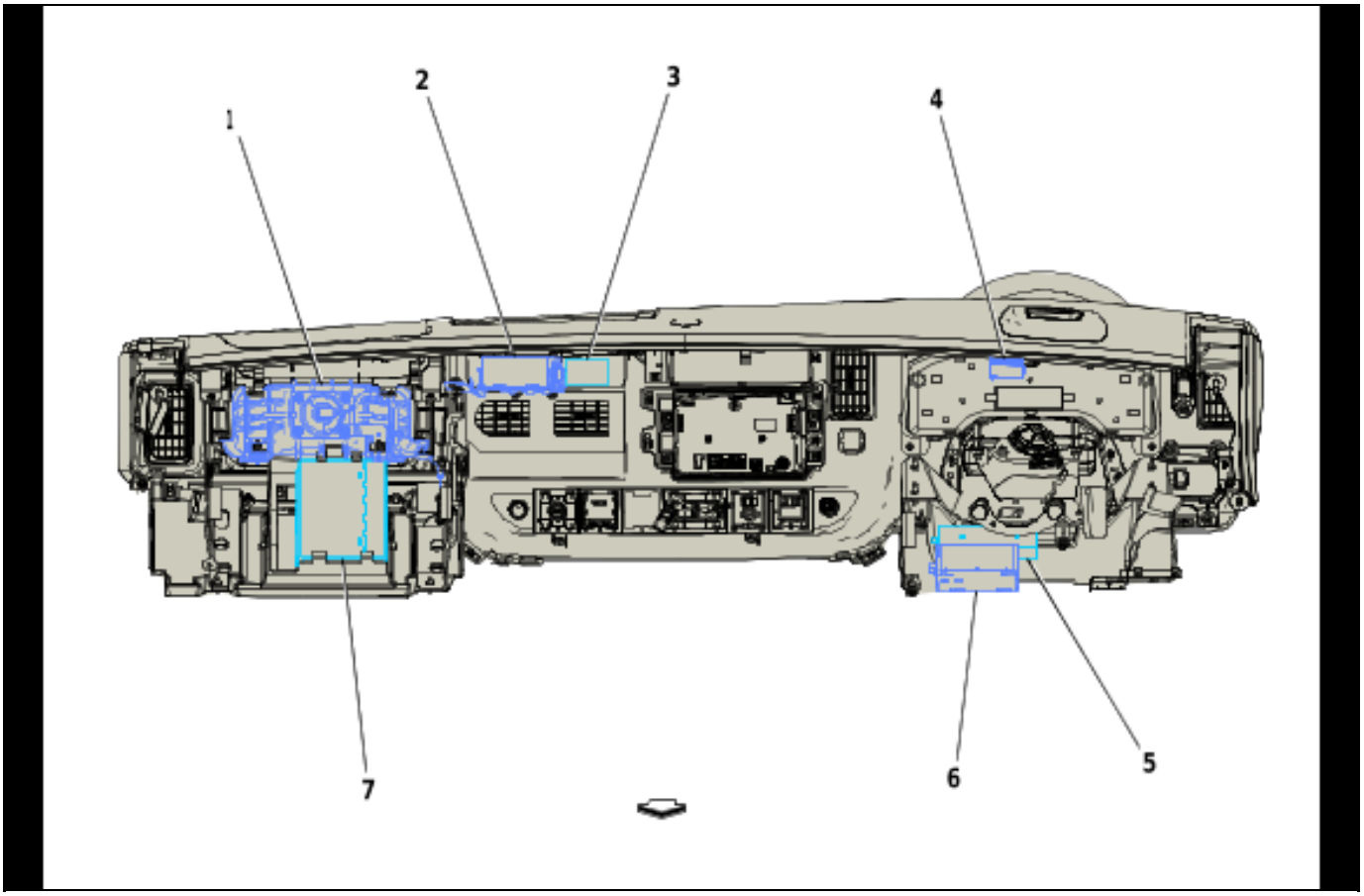


6040680

Items

(1) P43 Collision Alert Indicators (UFL)
(2) P16 Instrument Cluster
(3) B10 Ambient Light Sensor
(4) S74 Tow/Haul Mode Switch (MYD)
(5) S34 HVAC Controls Switch Assembly
(6) A11 Radio
(7) X80B Accessory Power Receptacle - Center Console 2
(8) X92 USB Receptacle (USR)
(9) X81 Accessory Power Receptacle - 110V AC (KI4)
(10) S155 Lane Departure Warning Switch (UFL)
(11) S51 Telematics Button Assembly (UE1)
(12) S40 Passenger Air Bag Disable Switch (C99)
(13) X84 Data Link Connector
(14) X80A Accessory Power Receptacle - Center Console 1
(15) X84 Data Link Connector
(16) B107 Accelerator Pedal Position Sensor
(17) B22 Brake Pedal Position Sensor
(18) S30 Headlamp Switch
(19) S16 Driver Information Center Switch

Instrument Panel Components (2 of 2)



6040682

Items

(1) F101 Passenger Instrument Panel Air Bag

(2) T1 Accessory DC/AC Power Inverter Module (KI4)

(3) K182 Parking Assist Control Module (UD7)

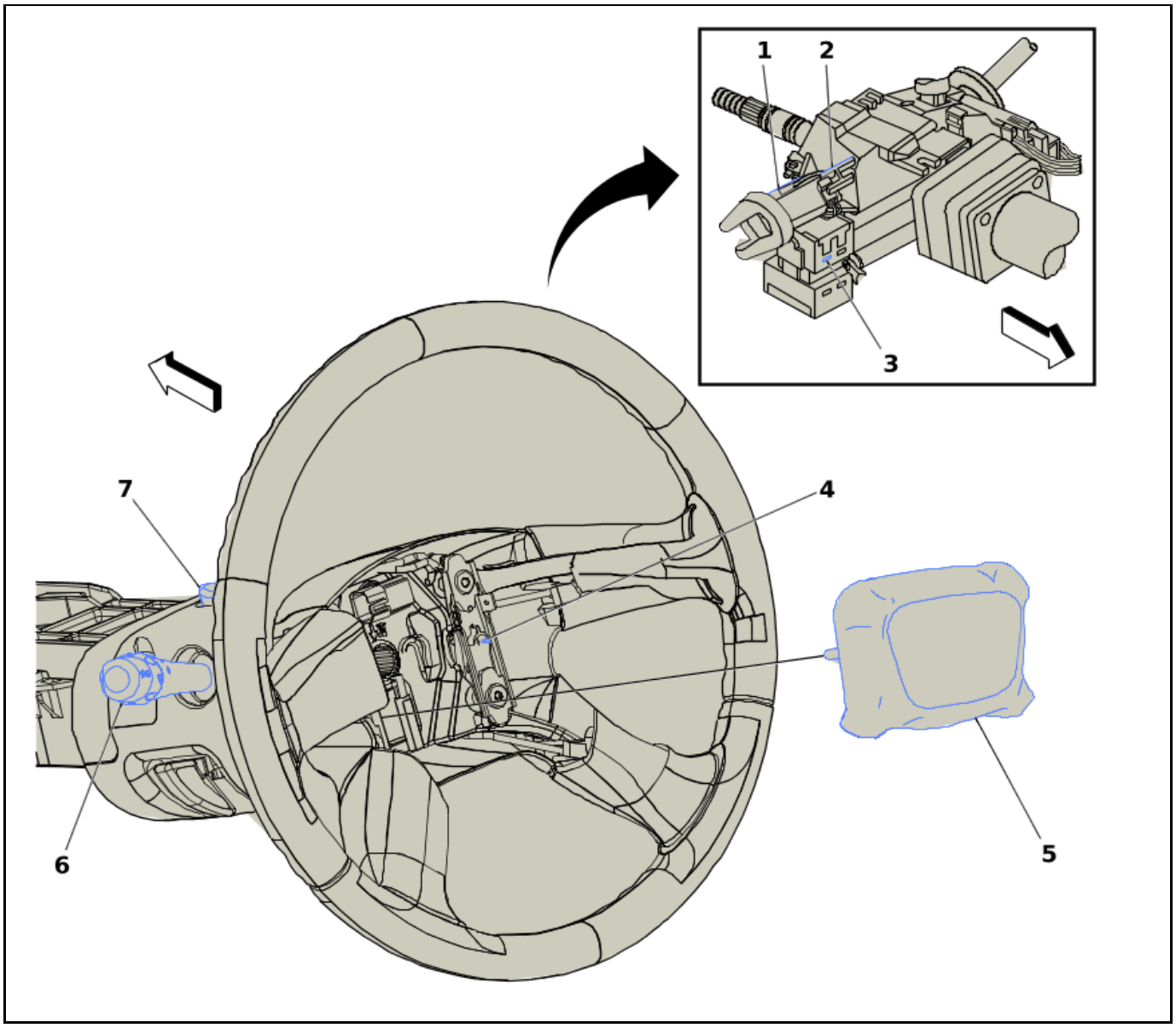
(4) K77 Remote Control Door Lock Receiver (ATG/UJM)

(5) A12 Digital Radio Receiver Control Module (U2K)

(6) K73 Telematics Communication Interface Control Module (UE1)

(7) K9 Body Control Module

Steering Column Components (1 of 2)

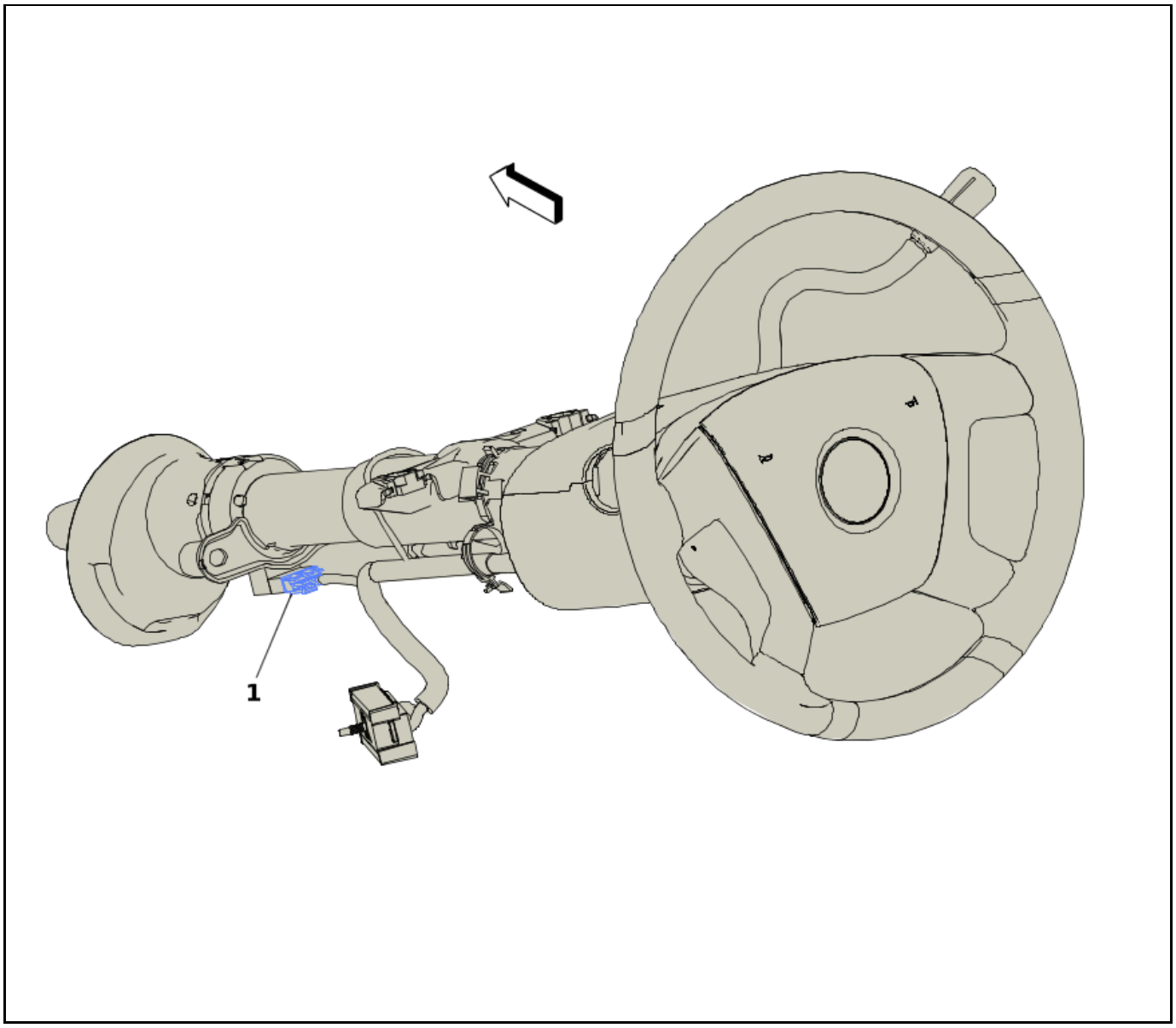


2831279

Items

(1) K64 Content Theft Deterrent Control Module
(2) M7 Transmission Shift Lock Control Solenoid Actuator
(3) S39 Ignition Switch
(4) S33 Horn Switch
(5) F107 Steering Wheel Air Bag
(6) S78 Turn Signal/Multifunction Switch
(7) S26 Hazard Warning Switch

Steering Column Components (2 of 2)

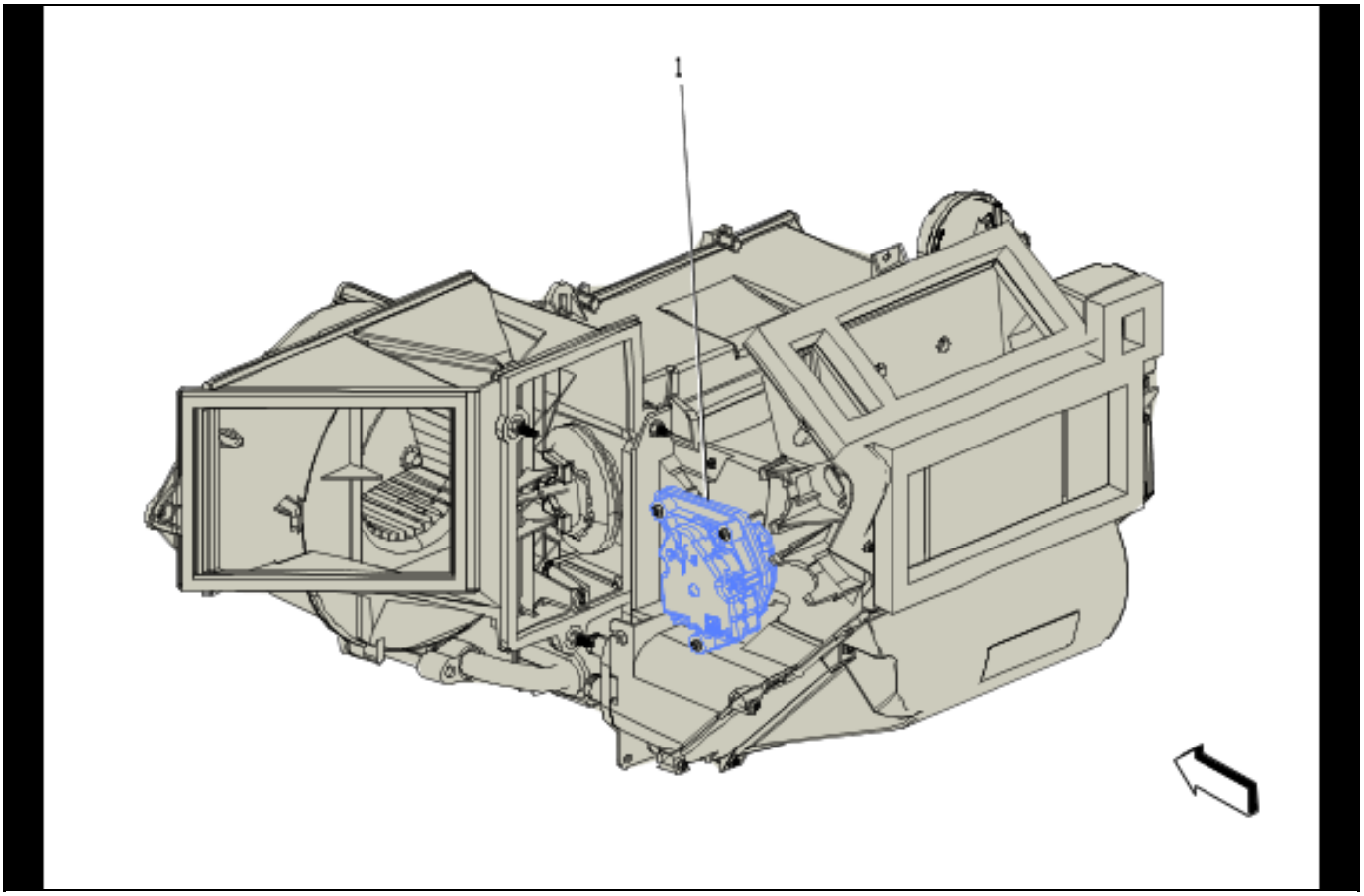


4004007

Items

(1) B99 Steering Wheel Angle Sensor

HVAC Case Components



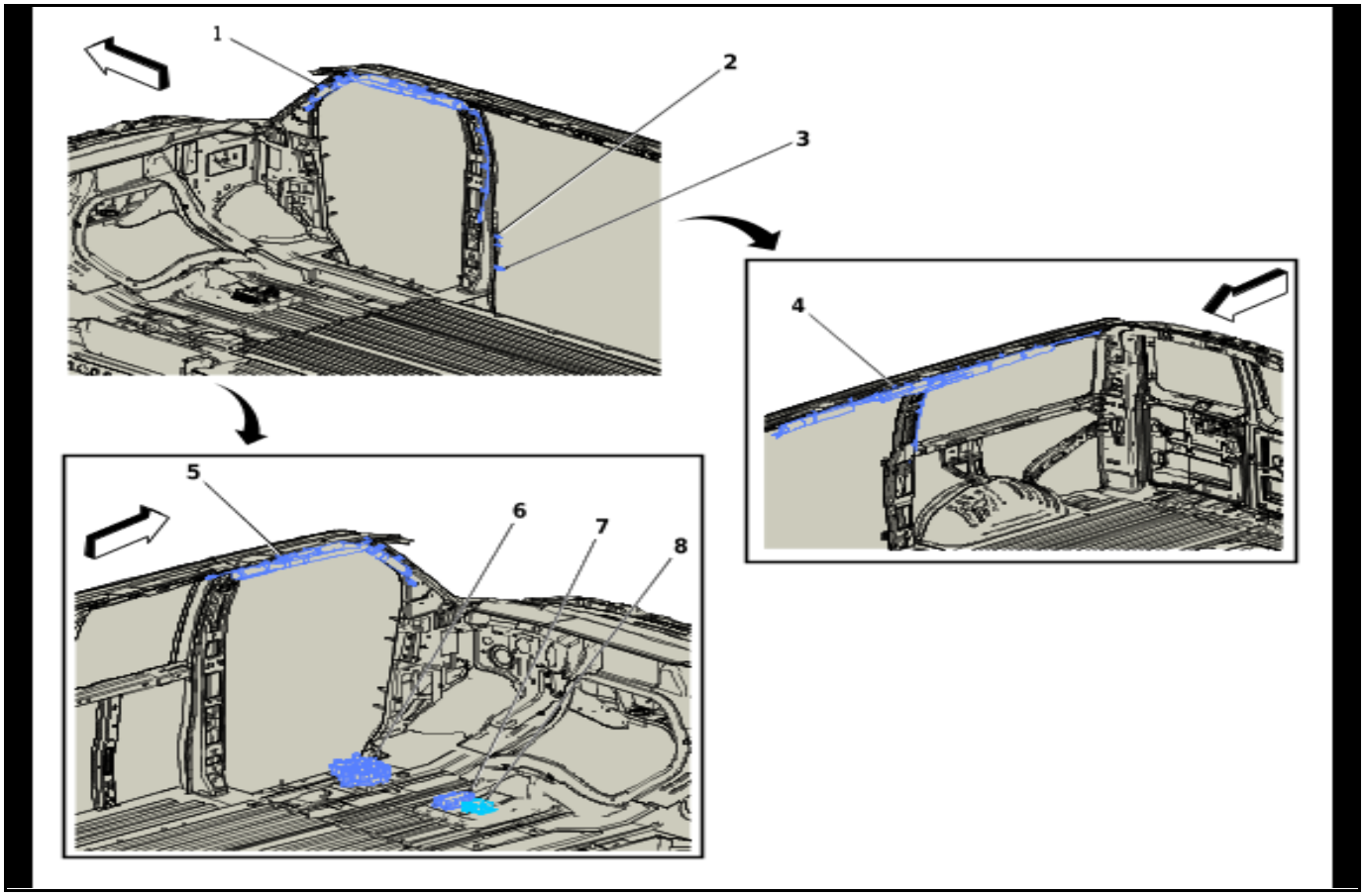
6043575

Items

(1) M6 Air Temperature Door Actuator

Passenger Compartment/Roof Component Views

Passenger Compartment Components



6003018

Items

(1) F105RF Roof Rail Air Bag - Right Front (ASF)

(2) X87RB Sliding Door Jamb Contact Plate - Right Body (AU3 with E24/YA2)

(3) B28F Door Ajar Switch - Right Sliding (Cargo/Passenger)

(4) F105RR Roof Rail Air Bag - Right Rear (ASF)

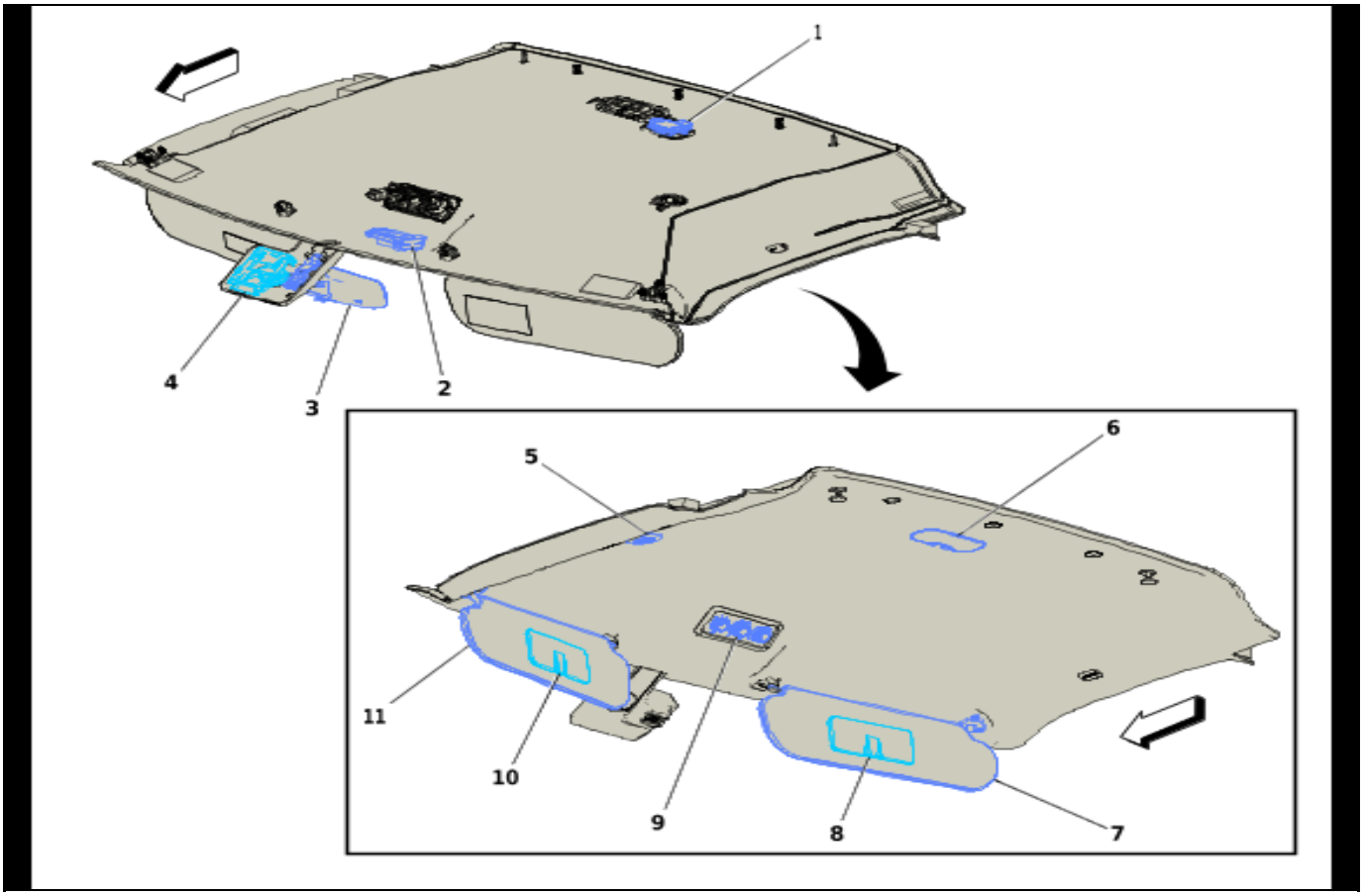
(5) F105LF Roof Rail Air Bag - Left Front (ASF)

(6) X52A Fuse Block - Passenger Compartment

(7) K36 Inflatable Restraint Sensing and Diagnostic Module

(8) B176 Multi-axis Acceleration Sensor Module

Headliner Components - Front

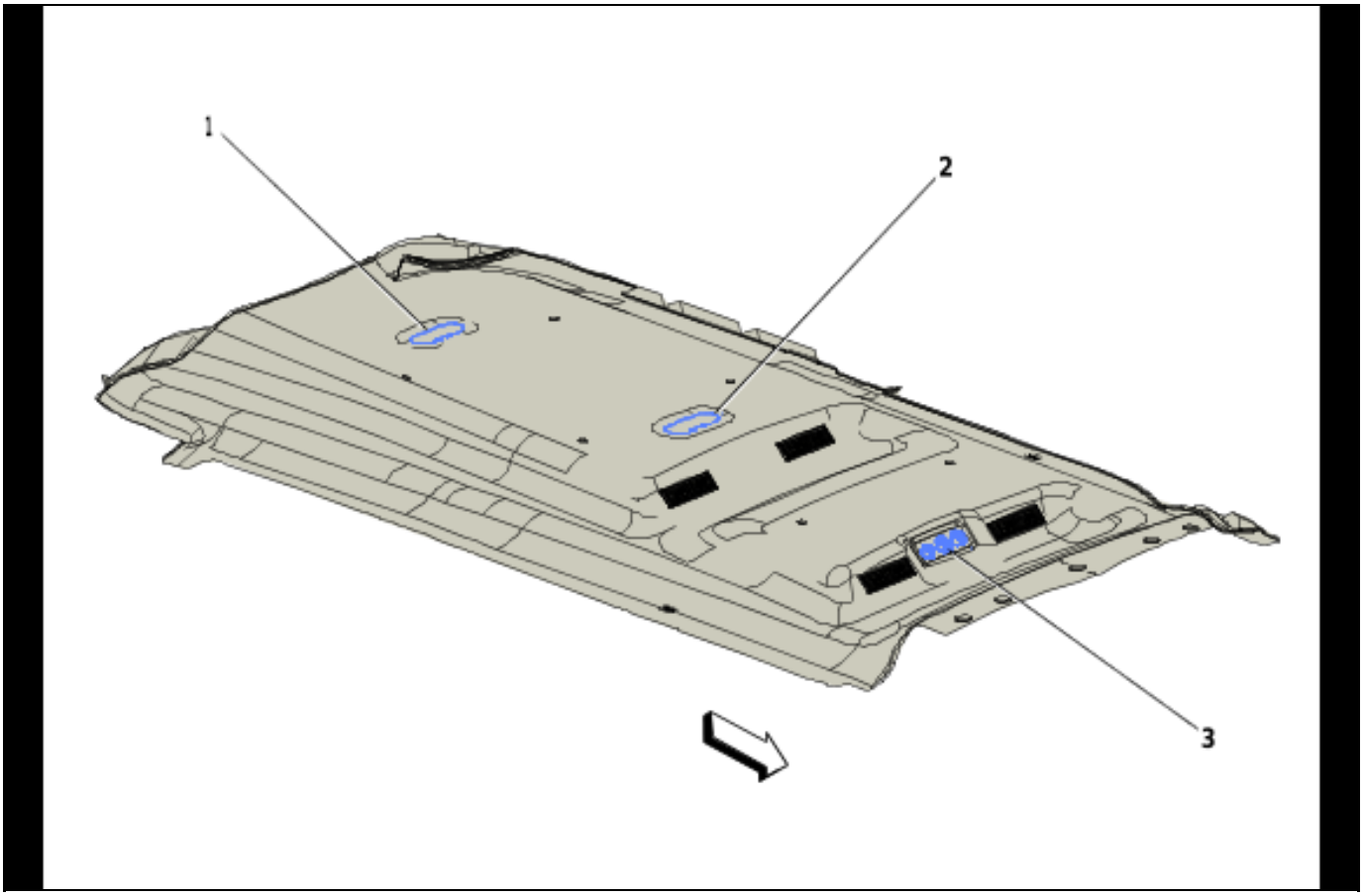


6003016

Items

(1) K18 Compass Module (U80)
(2) K33A HVAC Control Module - Auxiliary
(3) A10 Inside Rearview Mirror
(4) B174W Frontview Camera - Windshield (UFL)
(5) B24 Mobile Telephone Microphone (UE1)
(6) E37F Dome/Reading Lamps - Front (Without YF7)
(7) A3R Sunshade - Right (DH6)
(8) E31R Sunshade Mirror Lamp - Right (DH6)
(9) S34F HVAC Controls Switch Assembly - Auxiliary Front (C36/C69)
(10) E31L Sunshade Mirror Lamp - Left (DH6)
(11) A3L Sunshade - Left (DH6)

Headliner Components - Rear



6003017

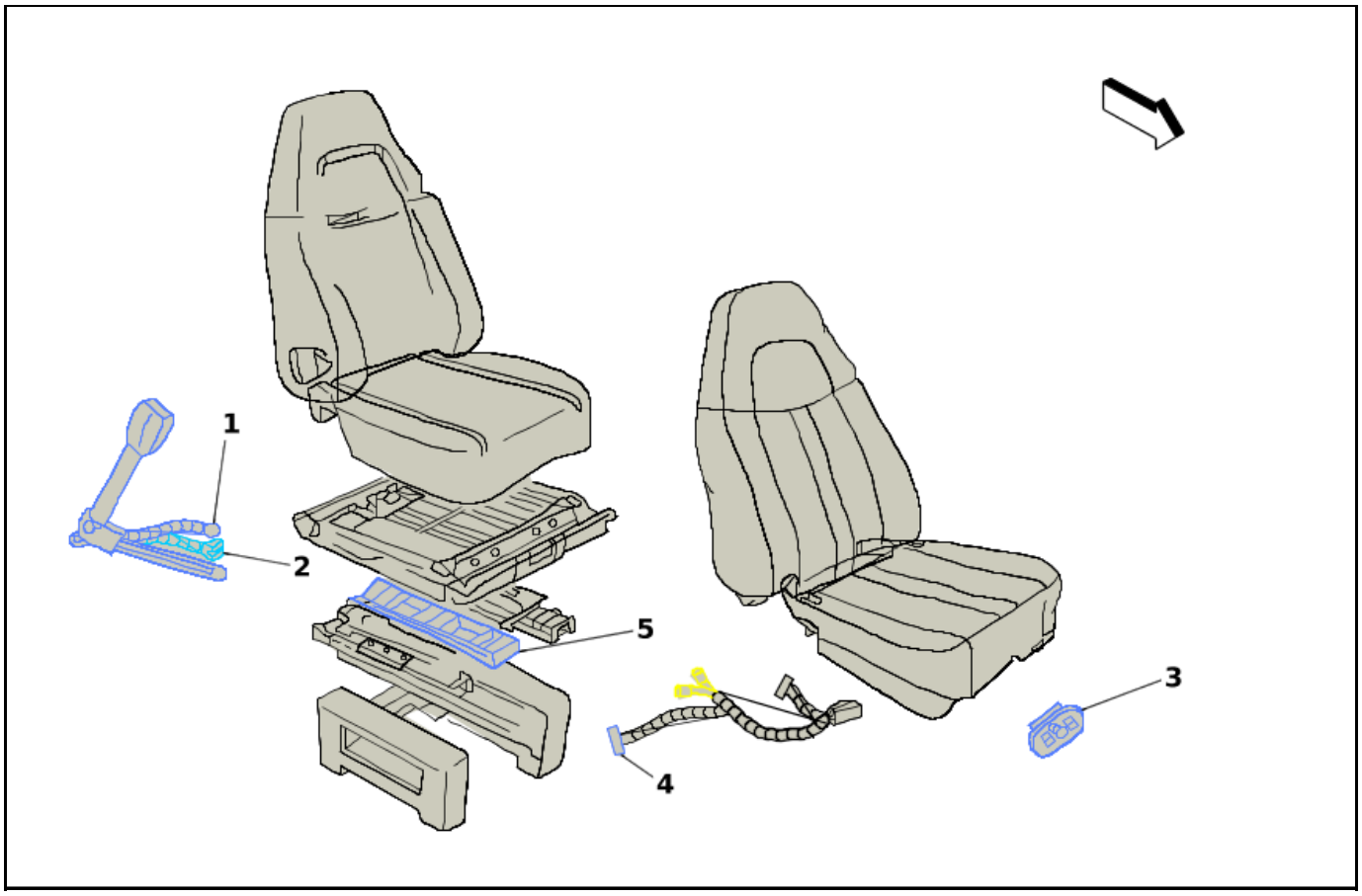
Items

(1) E37R Dome/Reading Lamps - Rear (Passenger)

(2) E37M Dome/Reading Lamps - Middle (Passenger)

(3) S34R HVAC Controls Switch Assembly - Auxiliary Rear (C36/C69 with Rear HVAC Controls)

Driver Seat Components



4004063

Items

(1) B153D Seat Belt Buckle - Driver

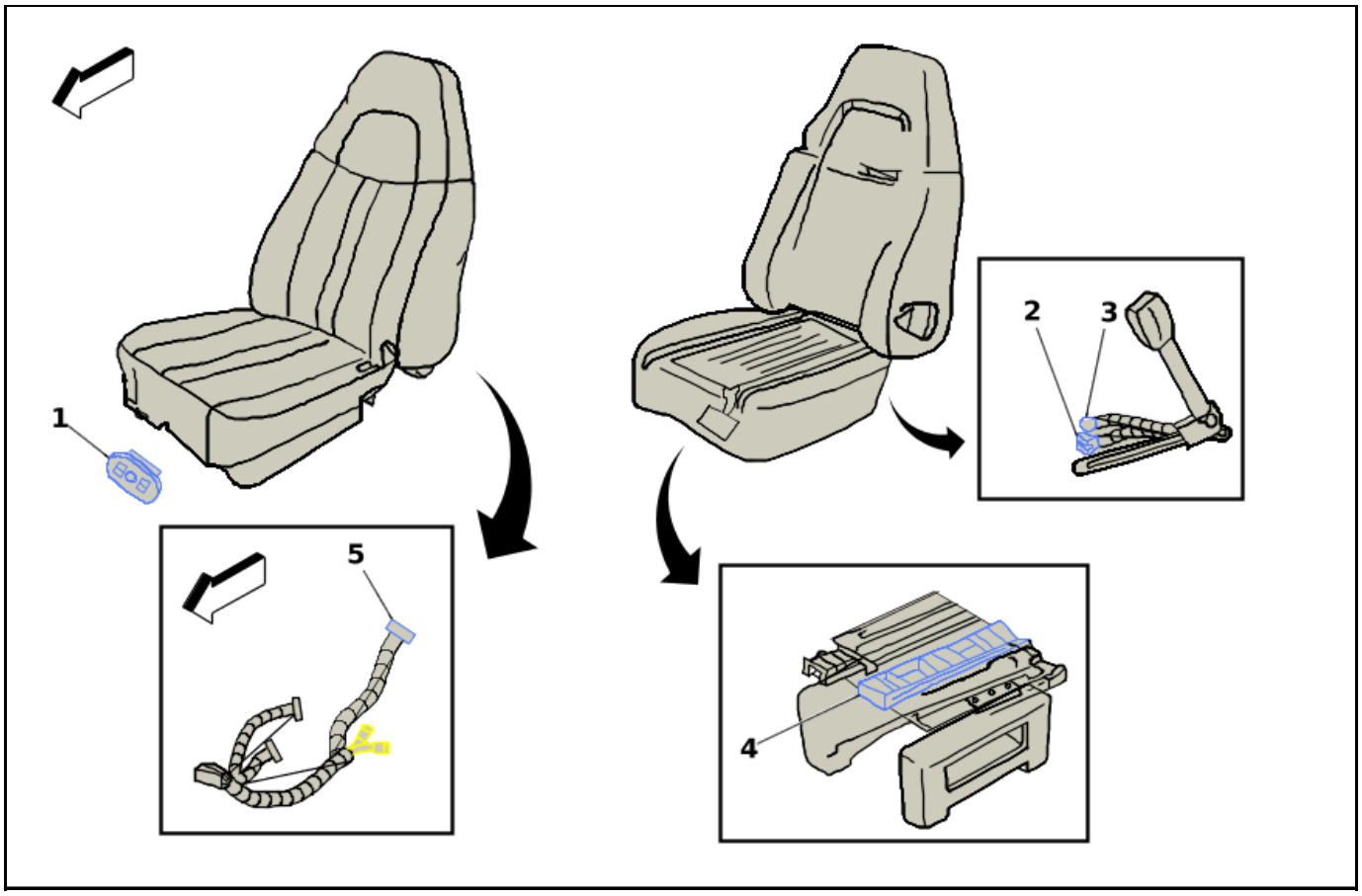
(2) F109D Seat Belt Buckle Pretensioner - Driver

(3) S64D Seat Adjuster Switch - Driver (AG1)

(4) X307 Body Wiring Harness to Seat Wiring Harness - Driver

(5) M49D Seat Motor Assembly - Driver (AG1)

Passenger Seat Components



4656488

Items

(1) S64P Seat Adjuster Switch - Passenger (AG2)

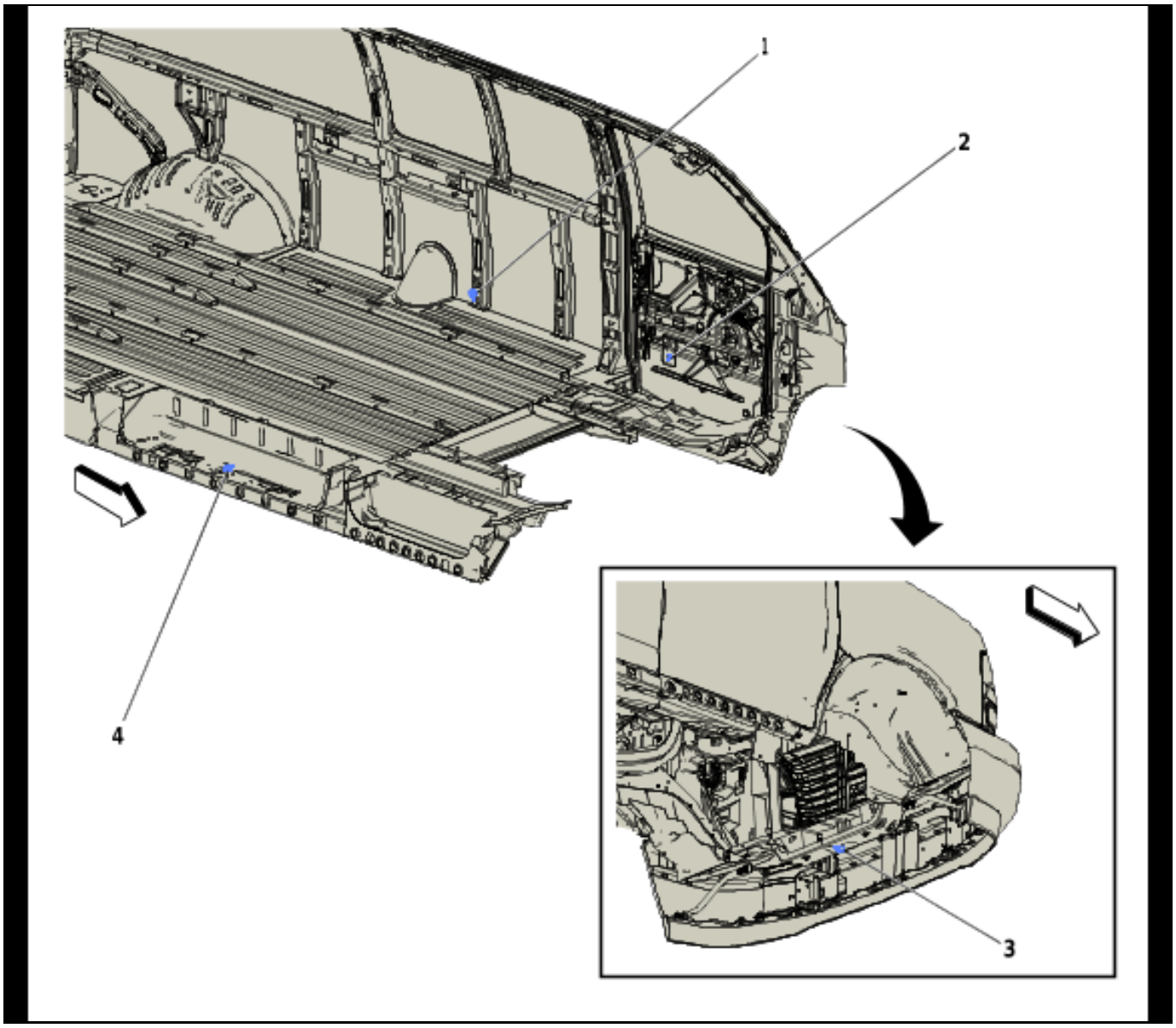
(2) F109P Seat Belt Buckle Pretensioner - Passenger (AK5)

(3) B153P Seat Belt Buckle - Passenger (AK5)

(4) M49P Seat Motor Assembly - Passenger (AG2)

(5) X306 Body Wiring Harness to Seat Wiring Harness - Passenger

Airbag Impact Sensor Components (E24)



6003434

Items

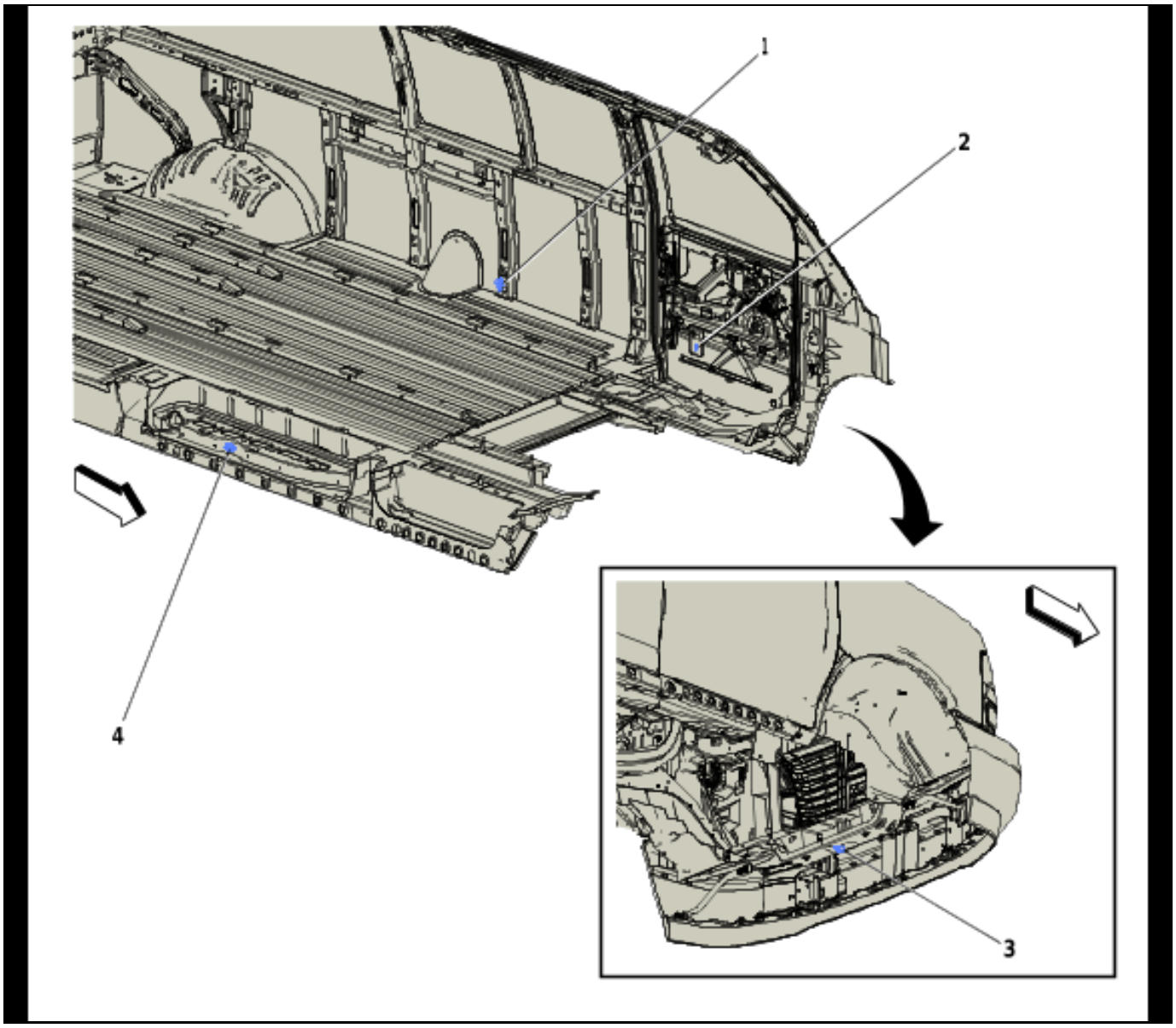
(1) B63LR Side Impact Sensor - Left Rear (ASF)

(2) B63LF Side Impact Sensor - Left Front (ASF)

(3) B59 Front Impact Sensor

(4) B63RR Side Impact Sensor - Right Rear (ASF)

Airbag Impact Sensor Components (YA2)



6003435

Items

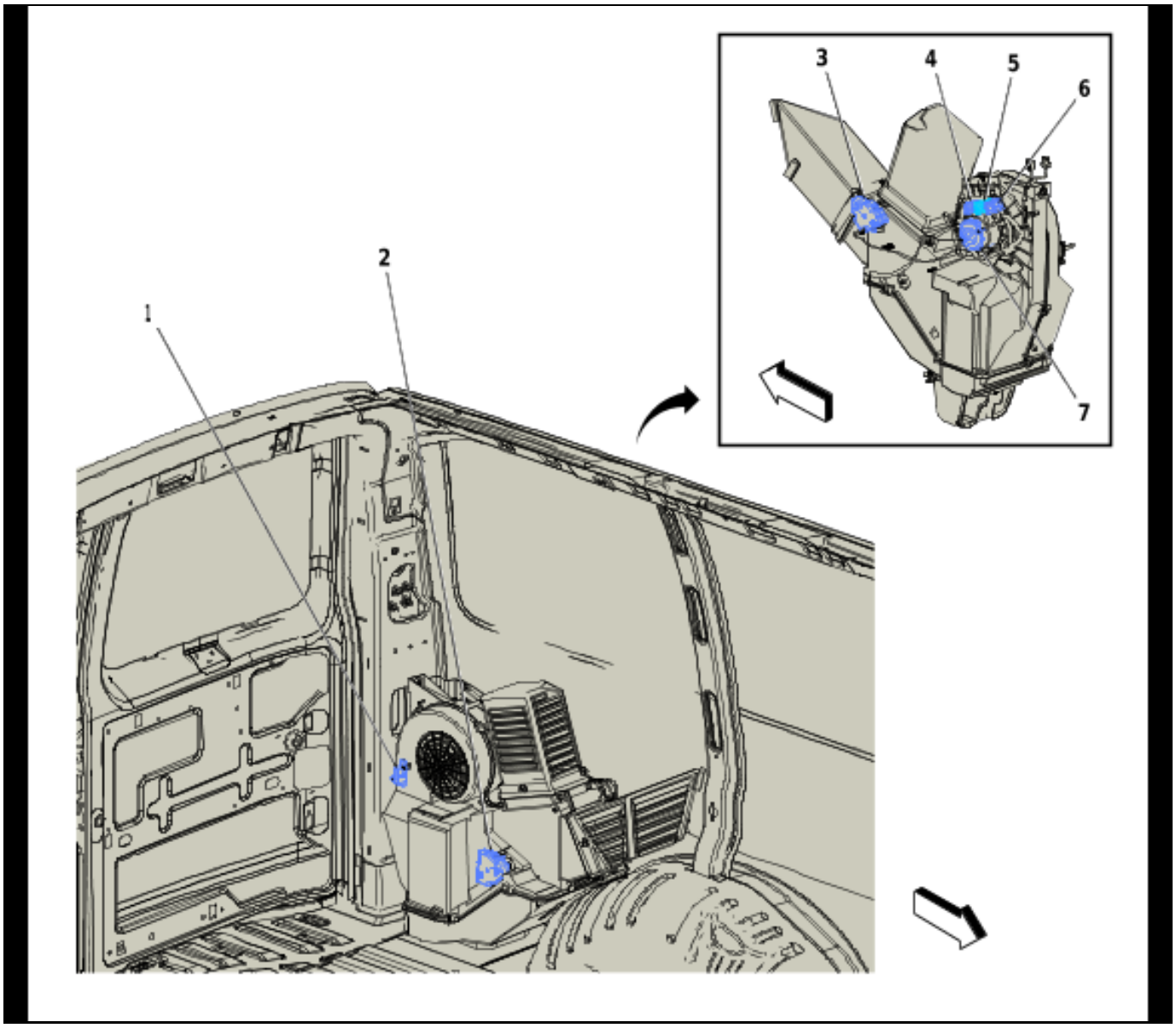
(1) B63LR Side Impact Sensor - Left Rear (ASF)

(2) B63LF Side Impact Sensor - Left Front (ASF)

(3) B59 Front Impact Sensor

(4) B63RR Side Impact Sensor - Right Rear (ASF)

Auxiliary HVAC Components (C36/C69)



6040683

Items

(1) R3B Blower Motor Resistor - Auxiliary (C36/C69)

(2) M6B Air Temperature Door Actuator - Auxiliary (C69)

(3) M37B Mode Door Actuator - Auxiliary (C69)

(4) KR32B Blower Motor High Speed Relay - Auxiliary

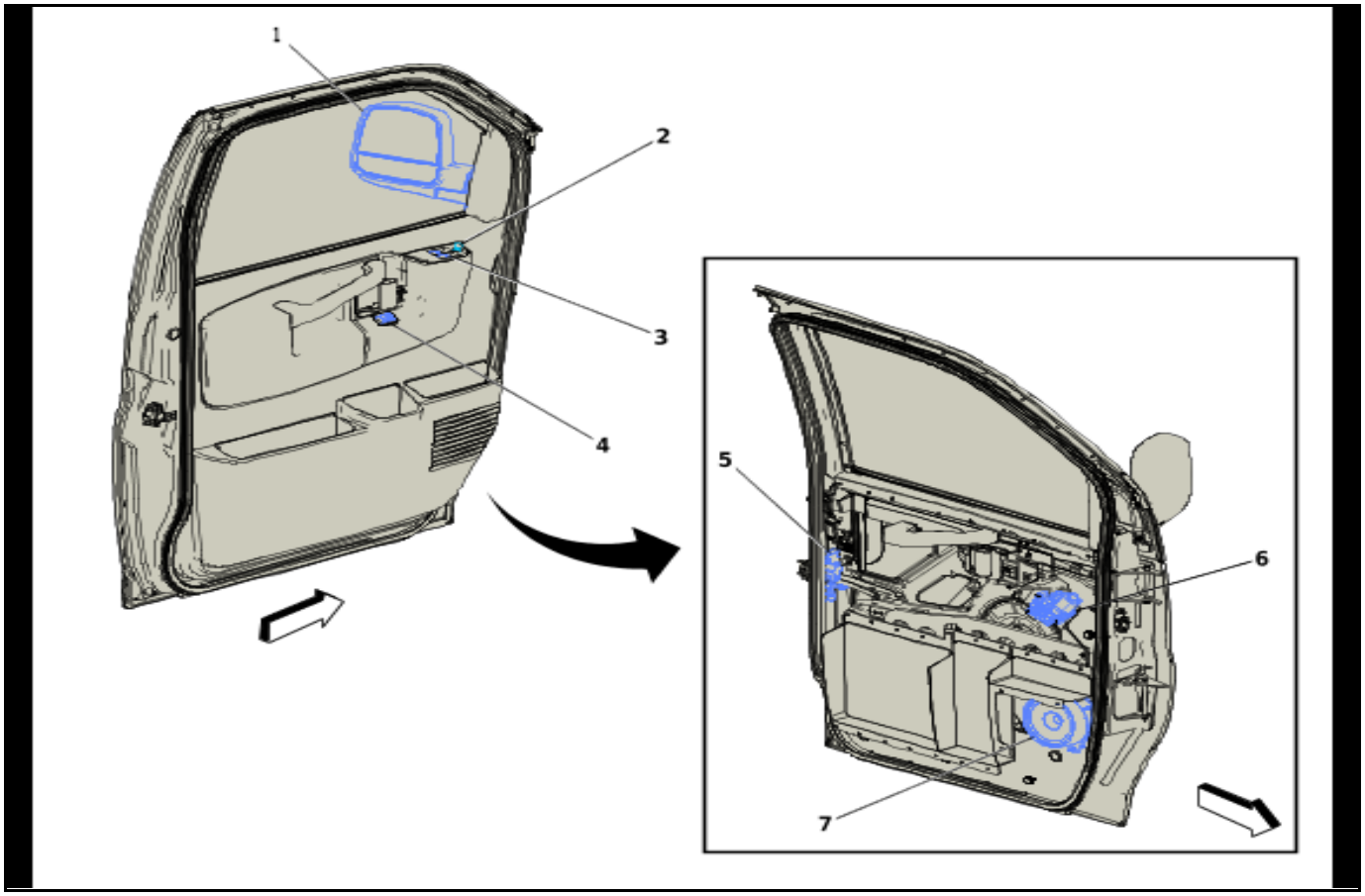
(5) KR32D Blower Motor Medium Speed Relay - Auxiliary

(6) KR32C Blower Motor Low Speed Relay - Auxiliary

(7) M6B Air Temperature Door Actuator - Auxiliary (C69)

Door Component Views

Driver Door Components

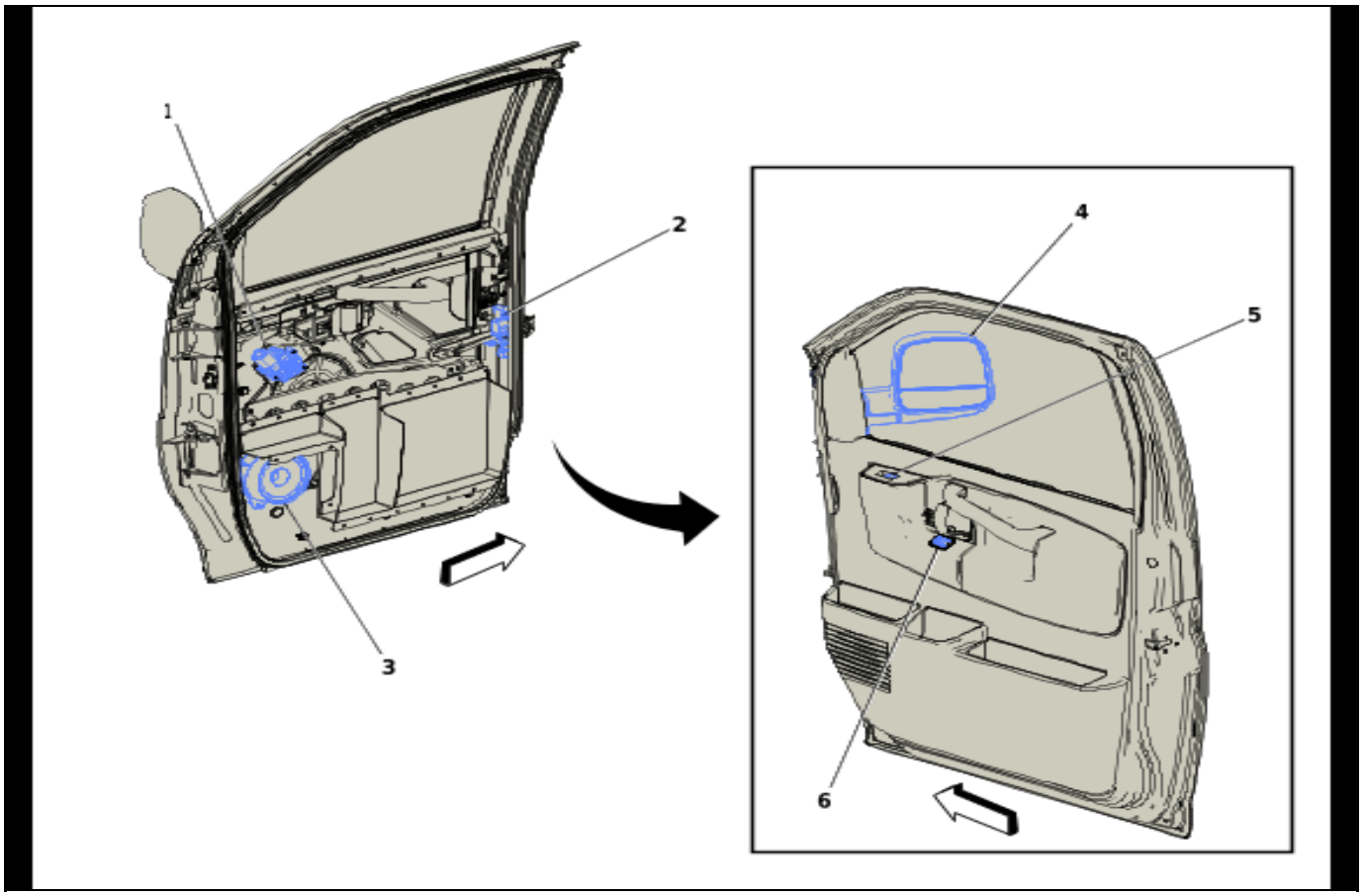


6003019

Items

(1) A9A Outside Rearview Mirror - Driver
(2) S52 Outside Rearview Mirror Switch (DE5)
(3) S79D Window Switch - Driver (A31)
(4) S13D Door Lock Switch - Driver (AU3)
(5) A23D Door Latch Assembly - Driver
(6) M74D Window Motor - Driver (A31)
(7) P19AG Speaker - Left Front Door

Front Passenger Door Components

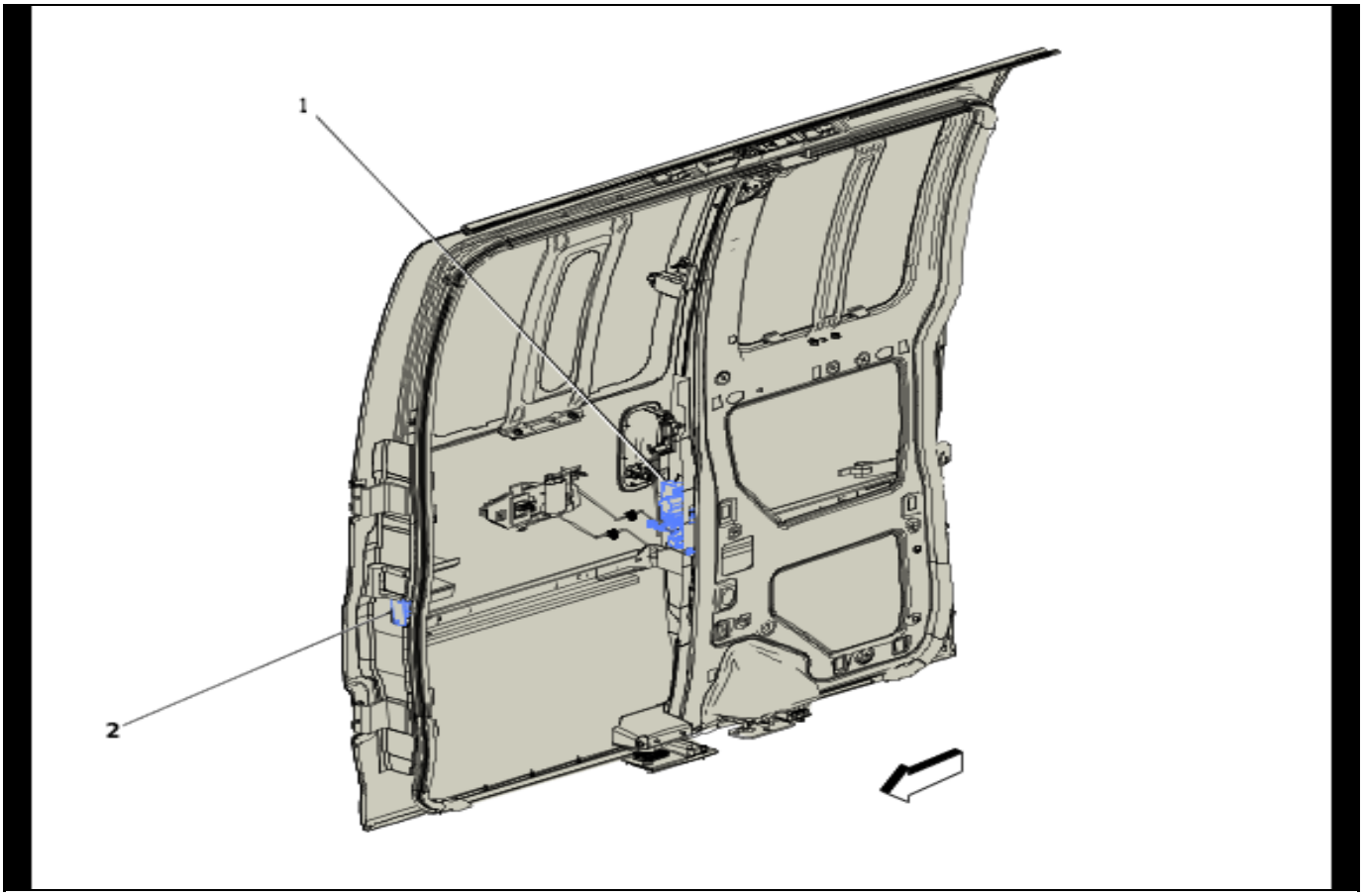


6003020

Items

(1) M74P Window Motor - Passenger (A31)
(2) A23P Door Latch Assembly - Passenger
(3) P19AH Speaker - Right Front Door
(4) A9B Outside Rearview Mirror - Passenger
(5) S79P Window Switch - Passenger (A31)
(6) S13P Door Lock Switch - Passenger (AU3)

Right Side Hinged Door Components (E24)



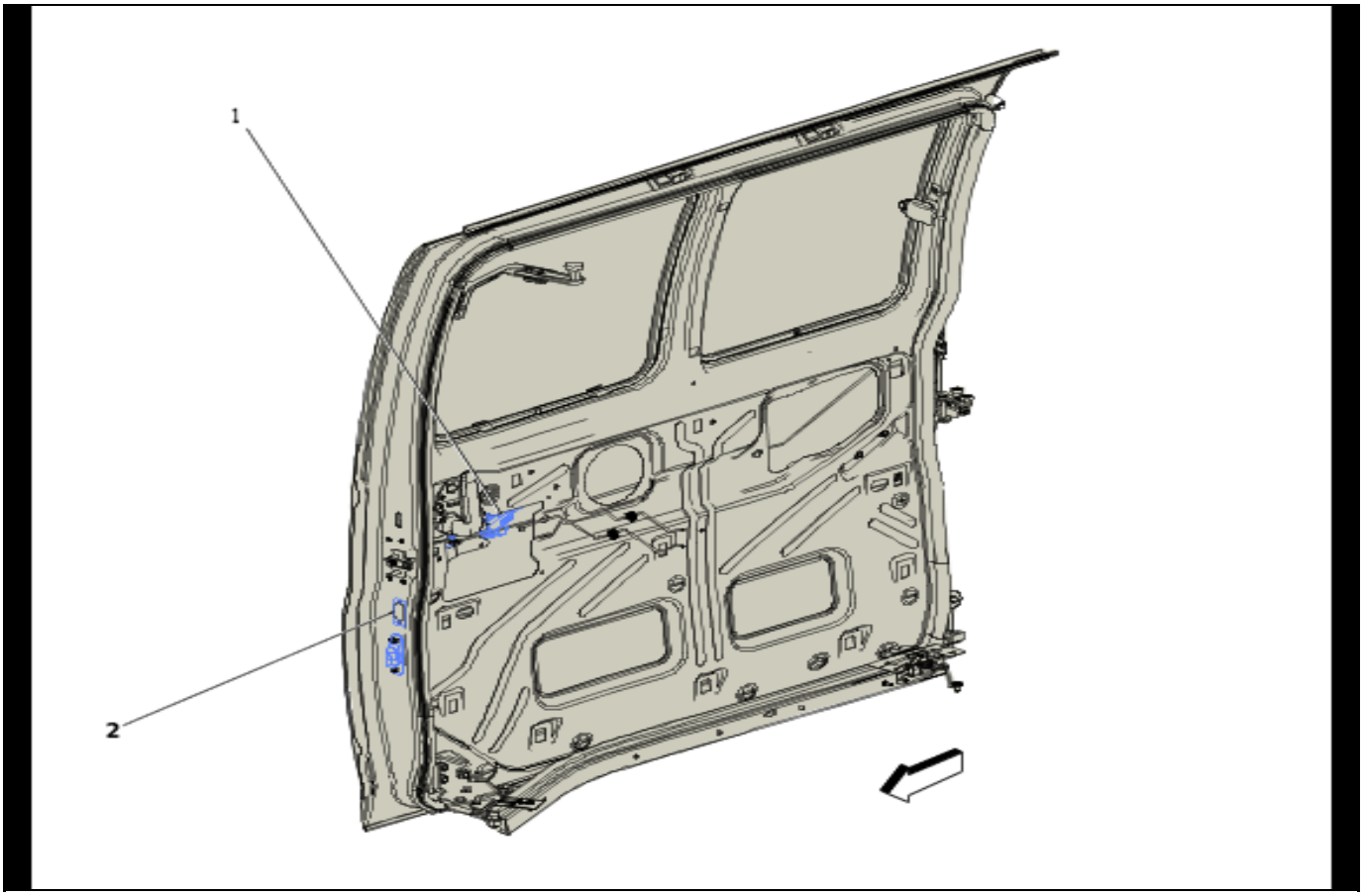
6003021

Items

(1) M14RR Door Lock Actuator - Right Rear (AU3)

(2) X87RB Sliding Door Jamb Contact Plate - Right Body (AU3 with E24/YA2)

Right Side Sliding Door Components (YA2)



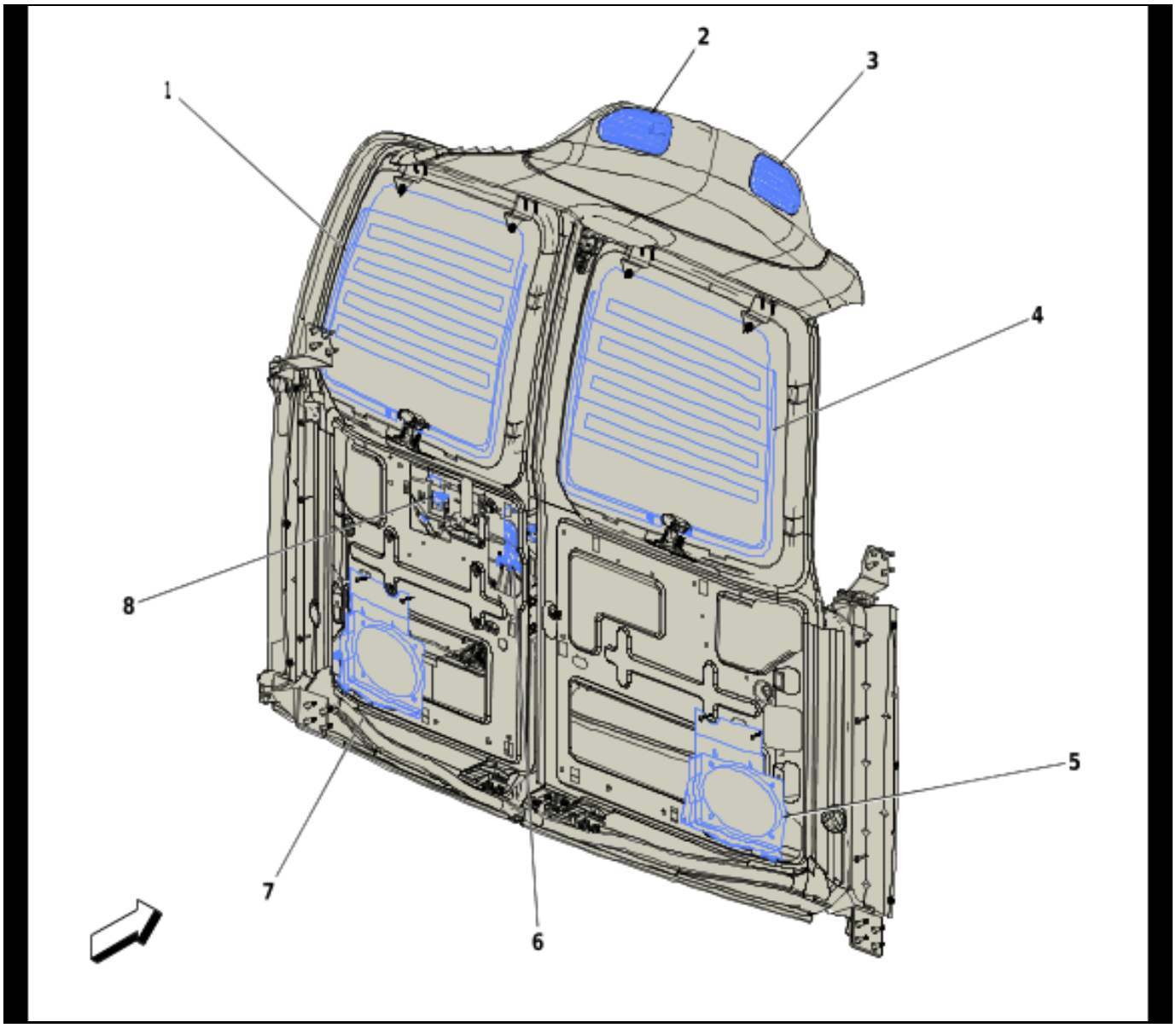
6003022

Items

(1) M14RR Door Lock Actuator - Right Rear (AU3)

(2) X87RB Sliding Door Jamb Contact Plate - Right Body (AU3 with E24/YA2)

Rear Door Components (Passenger or Cargo)



6003023

Items

(1) E18R Rear Defogger Grid - Right (C49)

(2) P19RR Speaker - Right Rear Roof (Cargo/ Passenger)

(3) P19LR Speaker - Left Rear Roof (Cargo/ Passenger)

(4) E18L Rear Defogger Grid - Left (C49)

(5) P19F Speaker - Left Rear Cargo Door (US8)

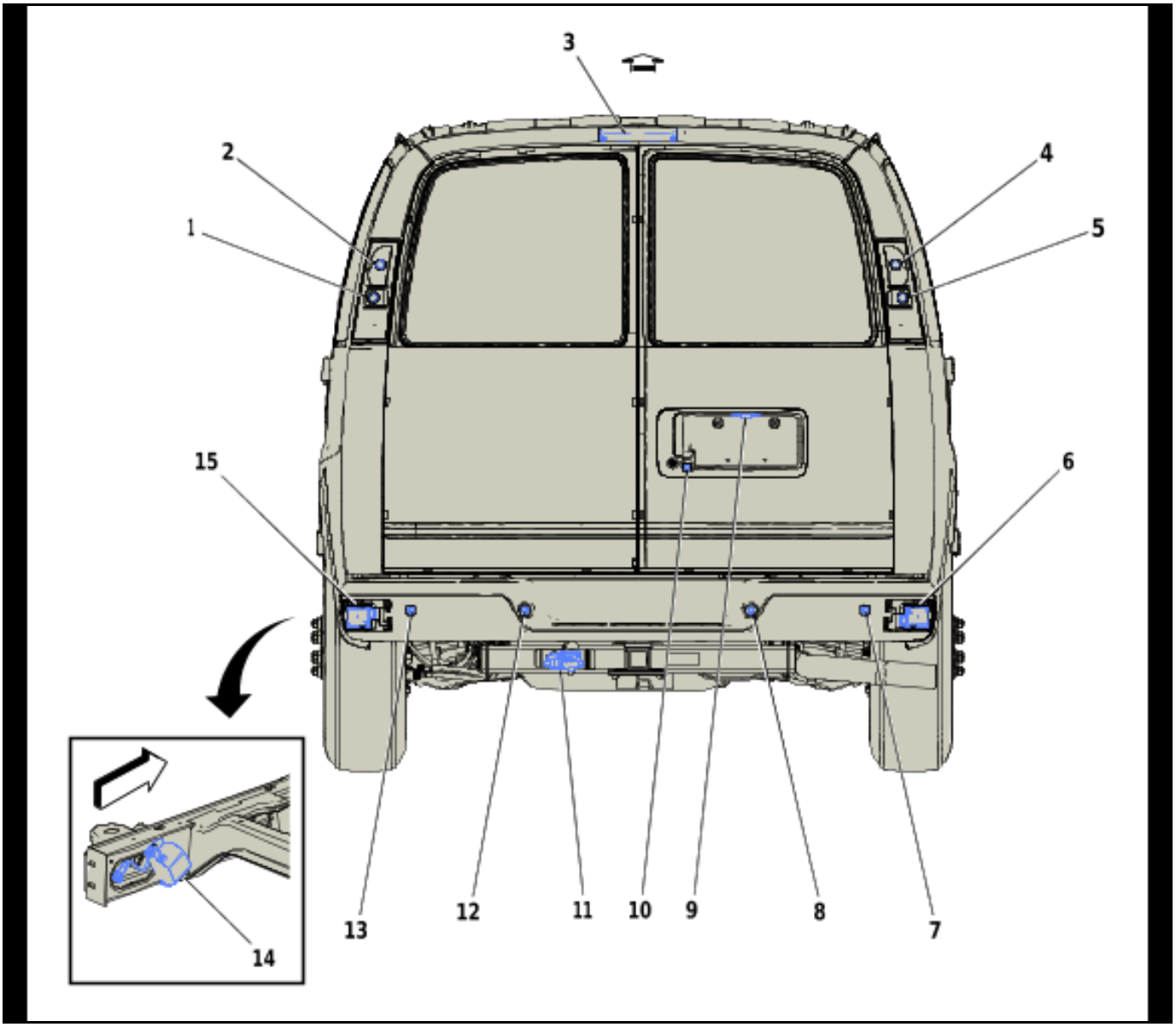
(6) M13 Door Latch Assembly - Rear Cargo (Passenger/Cargo)

(7) P19T Speaker - Right Rear Cargo Door (US8)

(8) S13A Door Lock Switch - Rear Cargo (Passenger/Cargo with AU3)

Luggage Compartment/Rear of Vehicle Component Views

Rear of Vehicle Components (Passenger or Cargo)



4650730

Items

(1) E5A Backup Lamp - Left

(2) E5S Tail/Stop and Turn Signal Lamp - Left (Passenger/Cargo)

(3) E6 Center High Mounted Stop Lamp (Passenger/Cargo)

(4) E5T Tail/Stop and Turn Signal Lamp - Right (Passenger/Cargo)

(5) E5B Backup Lamp - Right

(6) B218R Side Object Sensor Module - Right (UFT)

(7) B306H Parking Assist Sensor - Rear Right Outer (UD7)

(8) B306G Parking Assist Sensor - Rear Right Middle (UD7)

(9) E7 License Plate Lamp (Passenger/Cargo)

(10) B87 Rearview Camera (UVC)

(11) X88 Trailer Connector (UY7)

(12) B306F Parking Assist Sensor - Rear Left Middle (UD7)

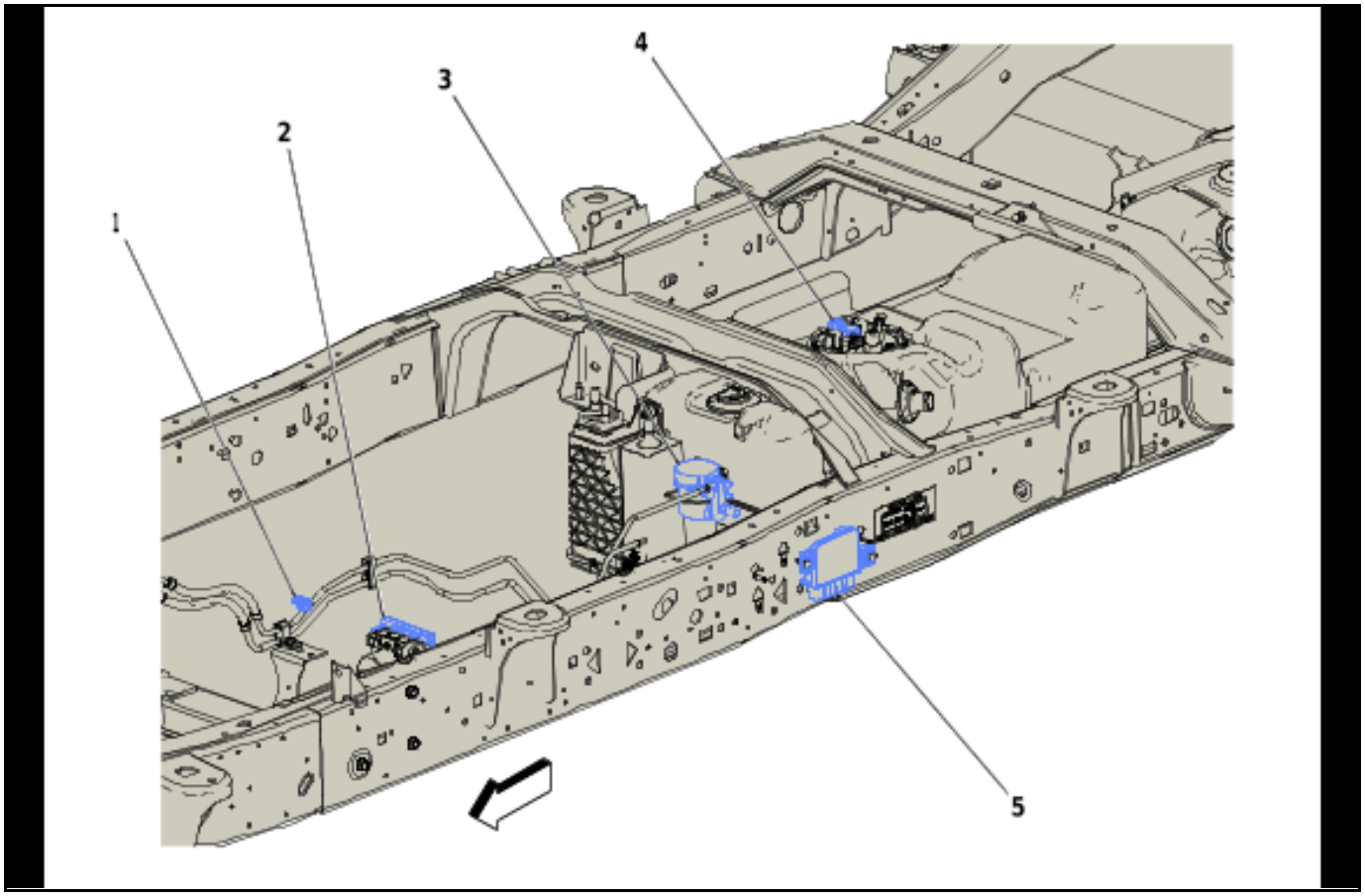
(13) B306E Parking Assist Sensor - Rear Left Outer (UD7)

(14) P3 Backup Alarm (8S3)

(15) B218L Side Object Sensor Module - Left (UFT)

Wheels/Vehicle Underbody Component Views

Frame and Underbody Components (Without NE7)

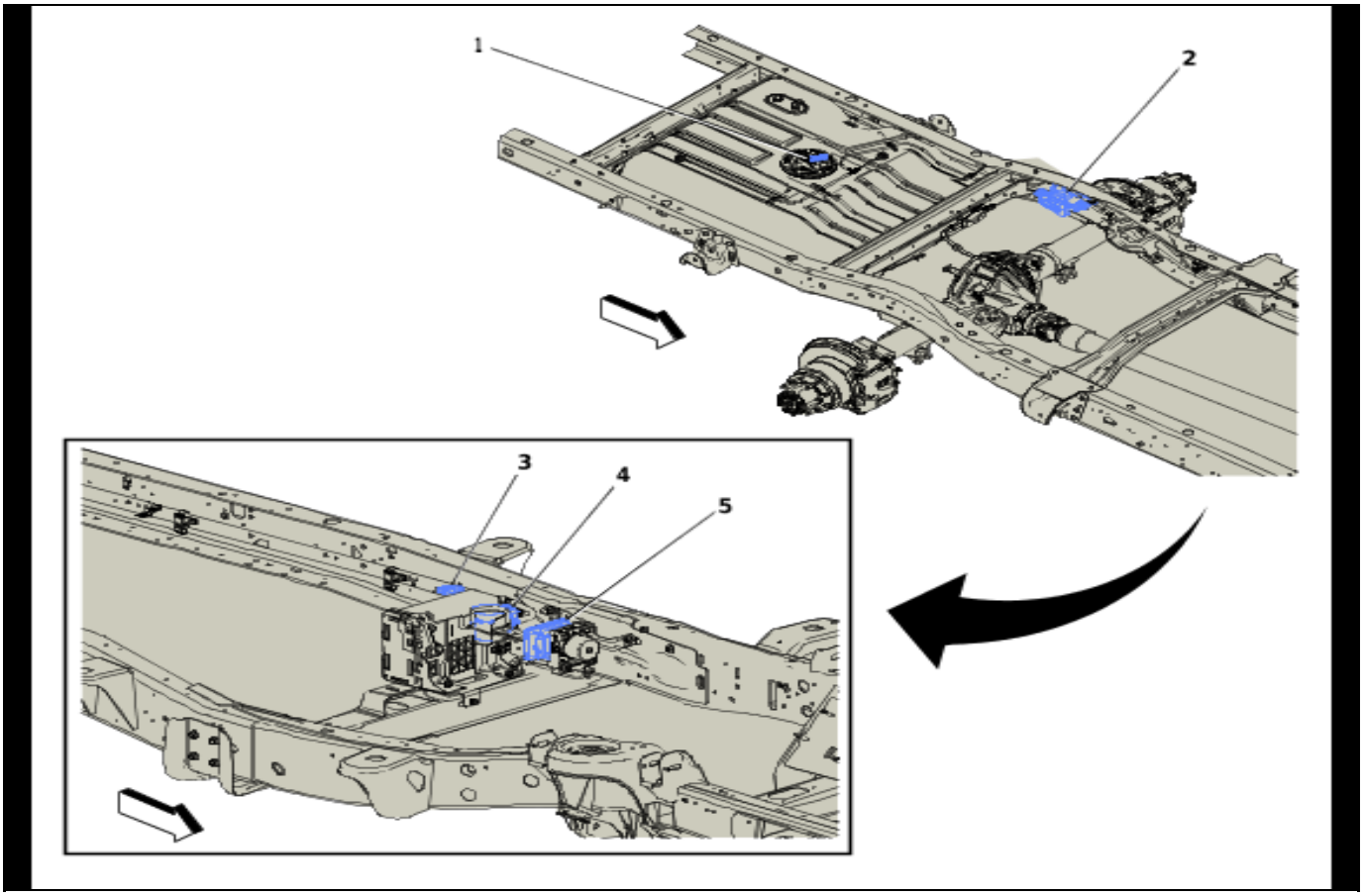


6003026

Items

(1) B47 Fuel Pressure Sensor
(2) K17 Electronic Brake Control Module
(3) Q13 Evaporative Emission Vent Solenoid Valve
(4) B150 Fuel Tank Pressure Sensor
(5) K111 Fuel Pump Driver Control Module

Frame and Underbody Components (With NE7)

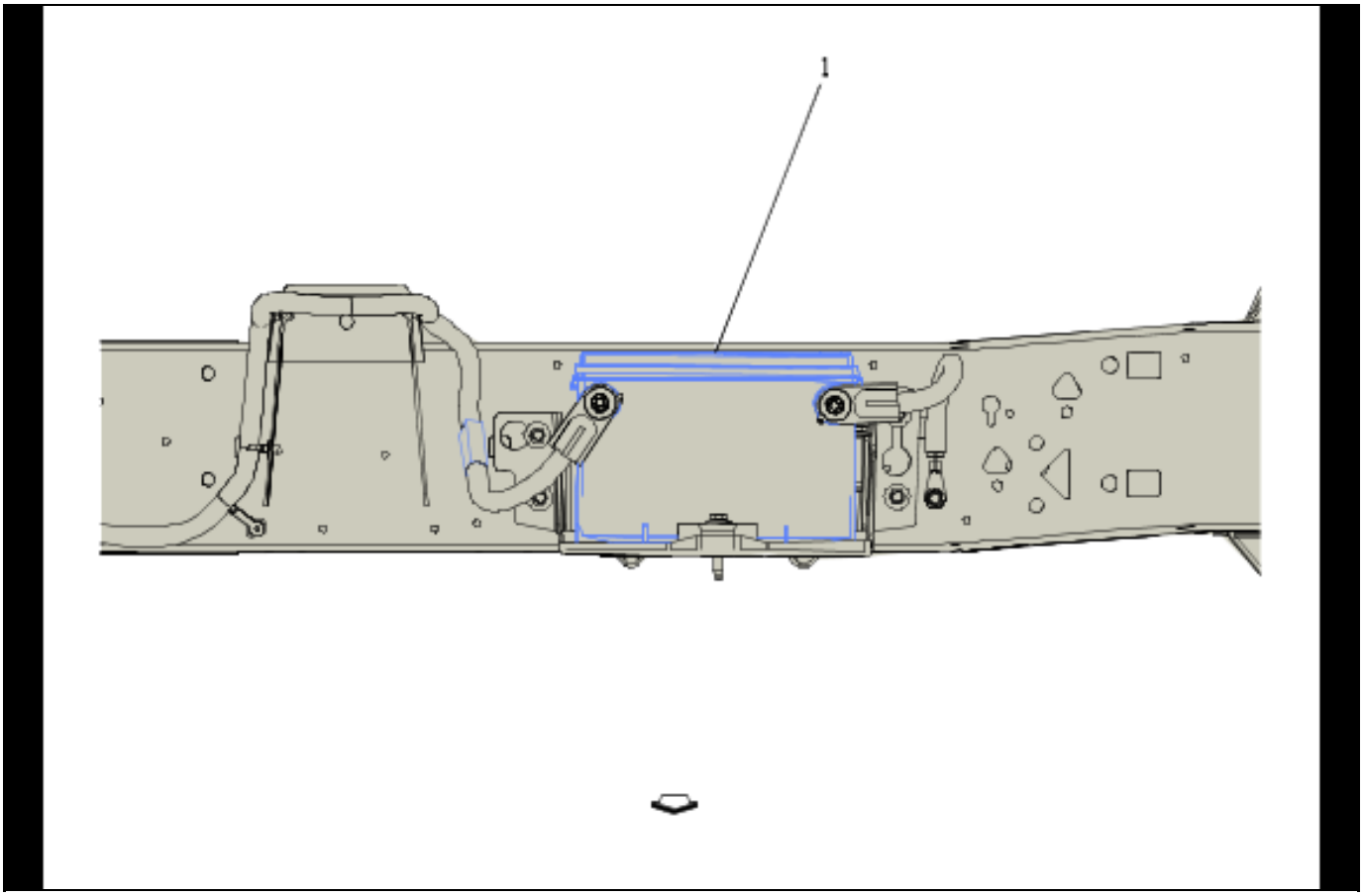


6003028

Items

(1) B150 Fuel Tank Pressure Sensor
(2) K111 Fuel Pump Driver Control Module
(3) B47 Fuel Pressure Sensor
(4) Q13 Evaporative Emission Vent Solenoid Valve
(5) K17 Electronic Brake Control Module

Auxiliary Battery (TP3)

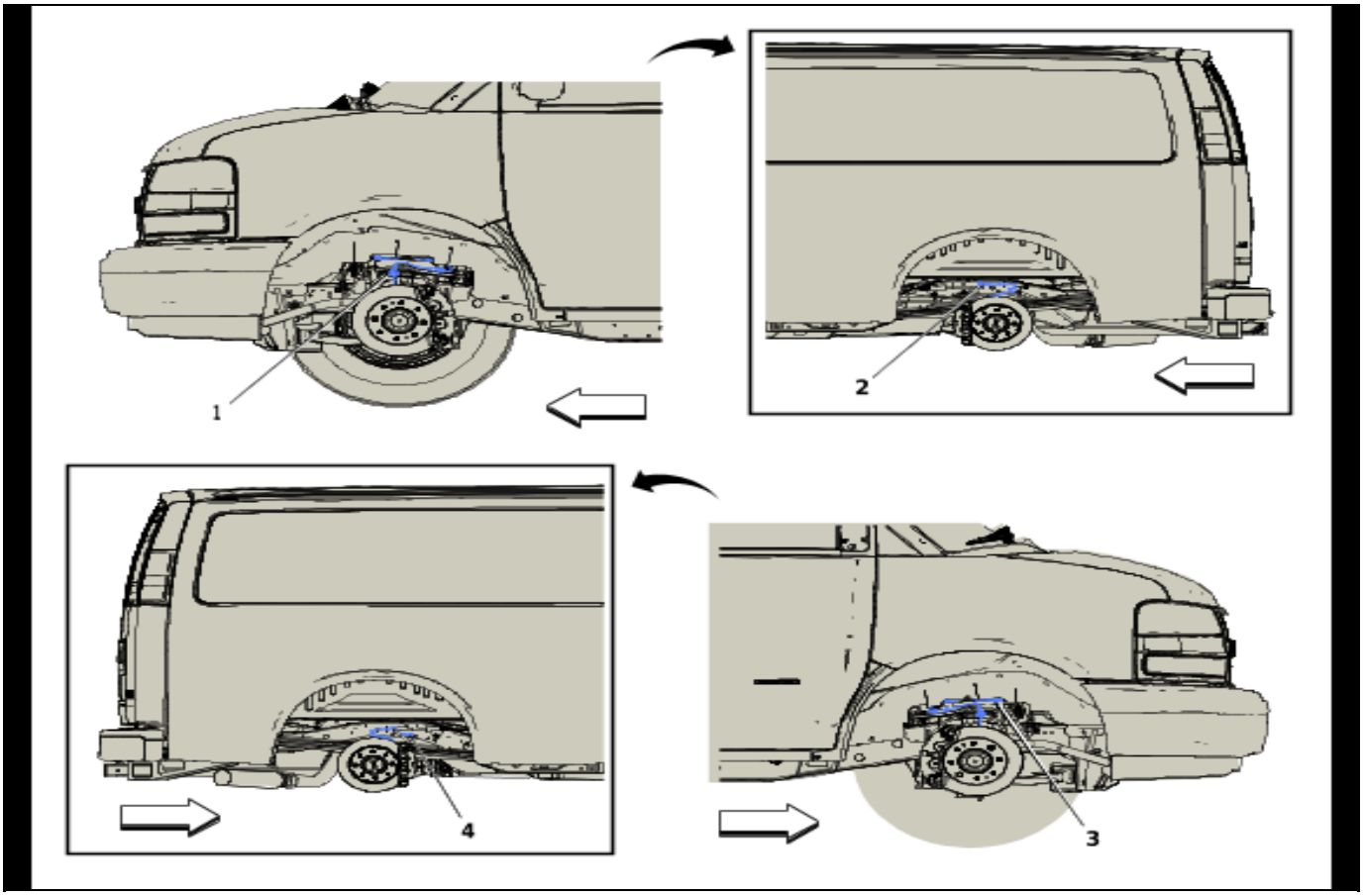


6133375

Items

(1) C1B Battery - Auxiliary (TP3)

Wheel Speed Sensors (Cargo/Passenger)

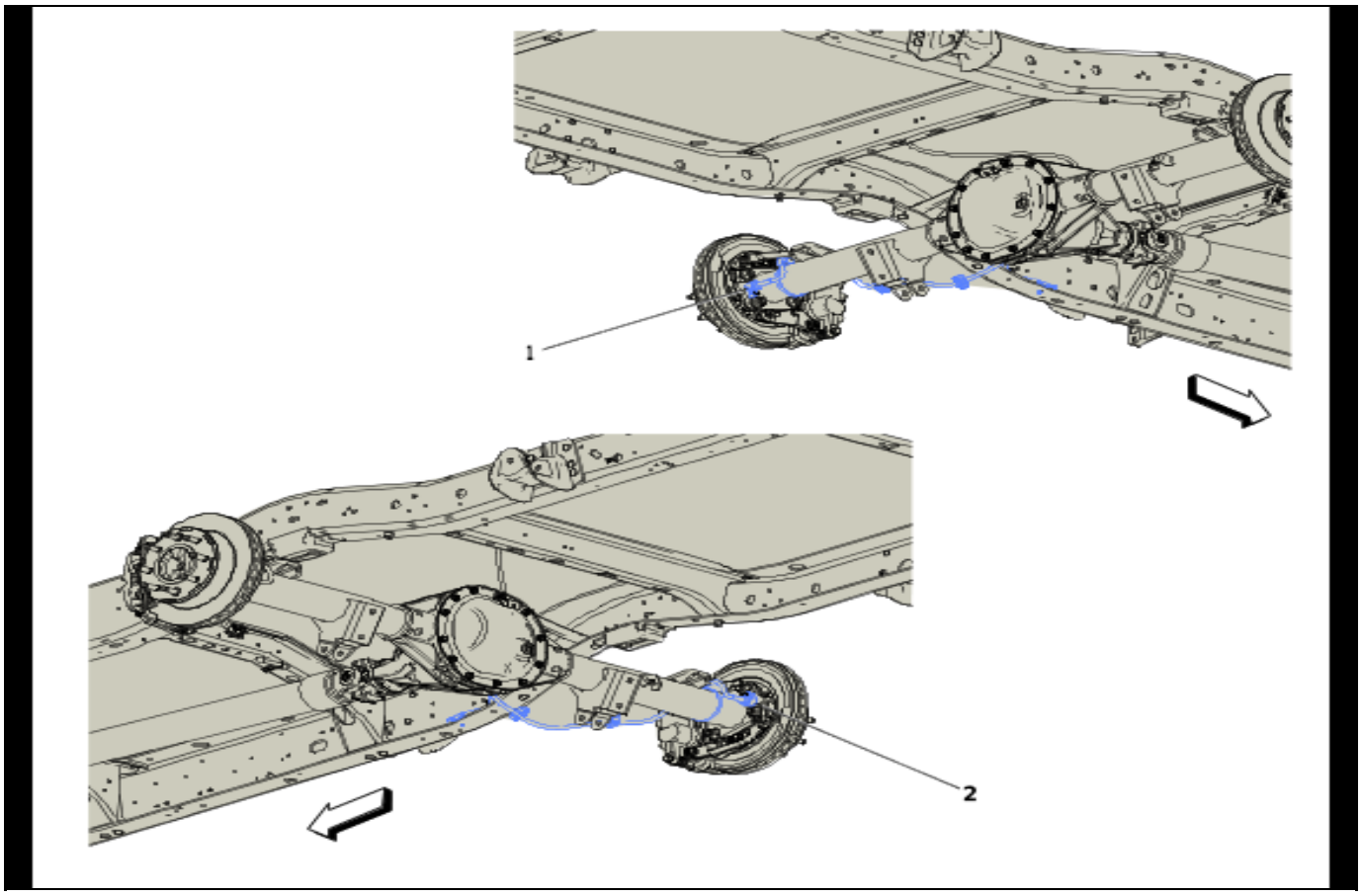


6003029

Items

(1) B5LF Wheel Speed Sensor - Left Front
(2) B5LR Wheel Speed Sensor - Left Rear
(3) B5RF Wheel Speed Sensor - Right Front
(4) B5RR Wheel Speed Sensor - Right Rear

Wheel Speed Sensors (Cutaway with SRW)



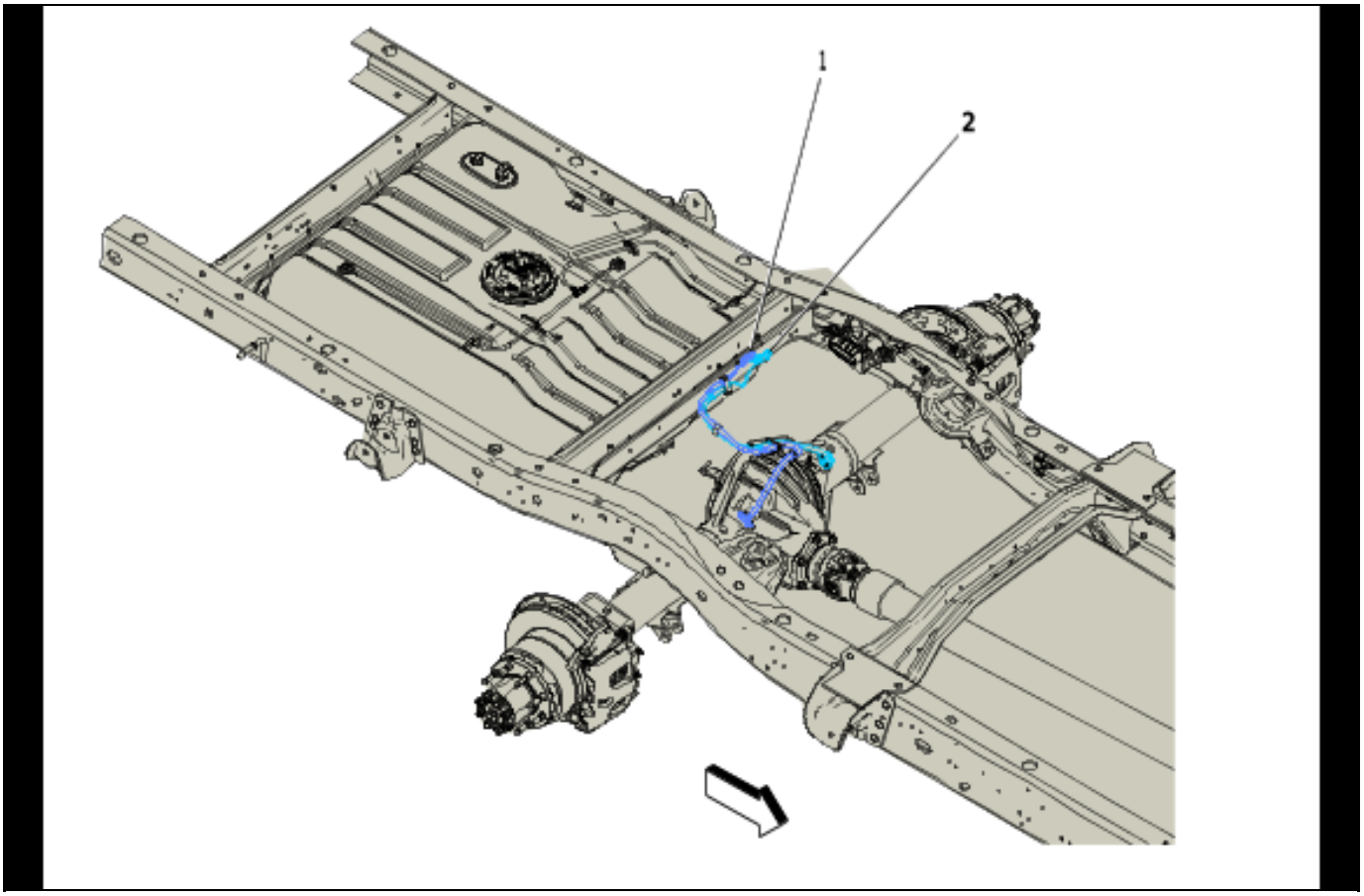
6003030

Items

(1) B5LR Wheel Speed Sensor - Left Rear

(2) B5RR Wheel Speed Sensor - Right Rear

Wheel Speed Sensors (Cutaway with DRW)



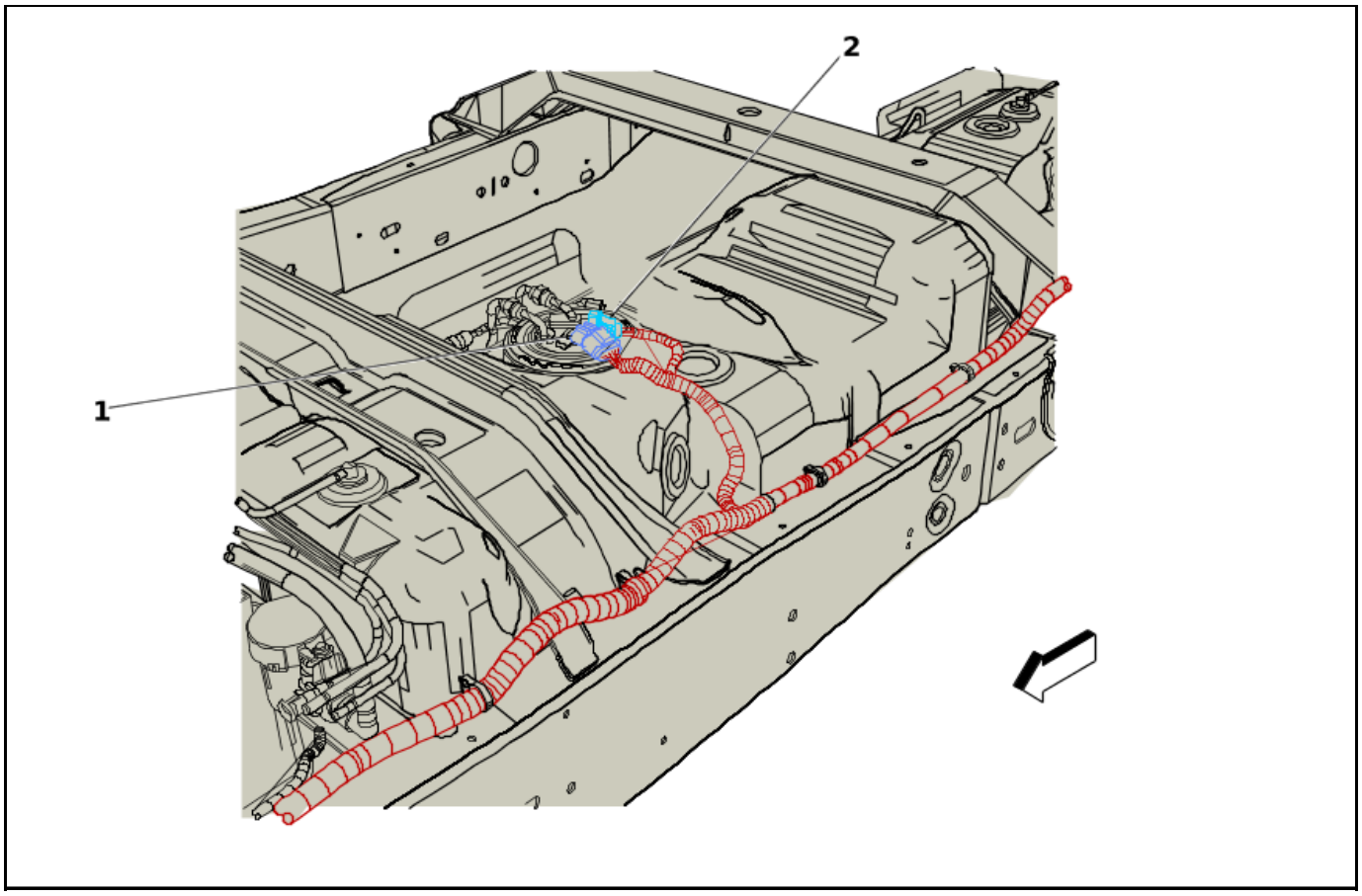
6003031

Items

(1) B5RR Wheel Speed Sensor - Right Rear

(2) B5LR Wheel Speed Sensor - Left Rear

Fuel Tank Components (Without NE7)



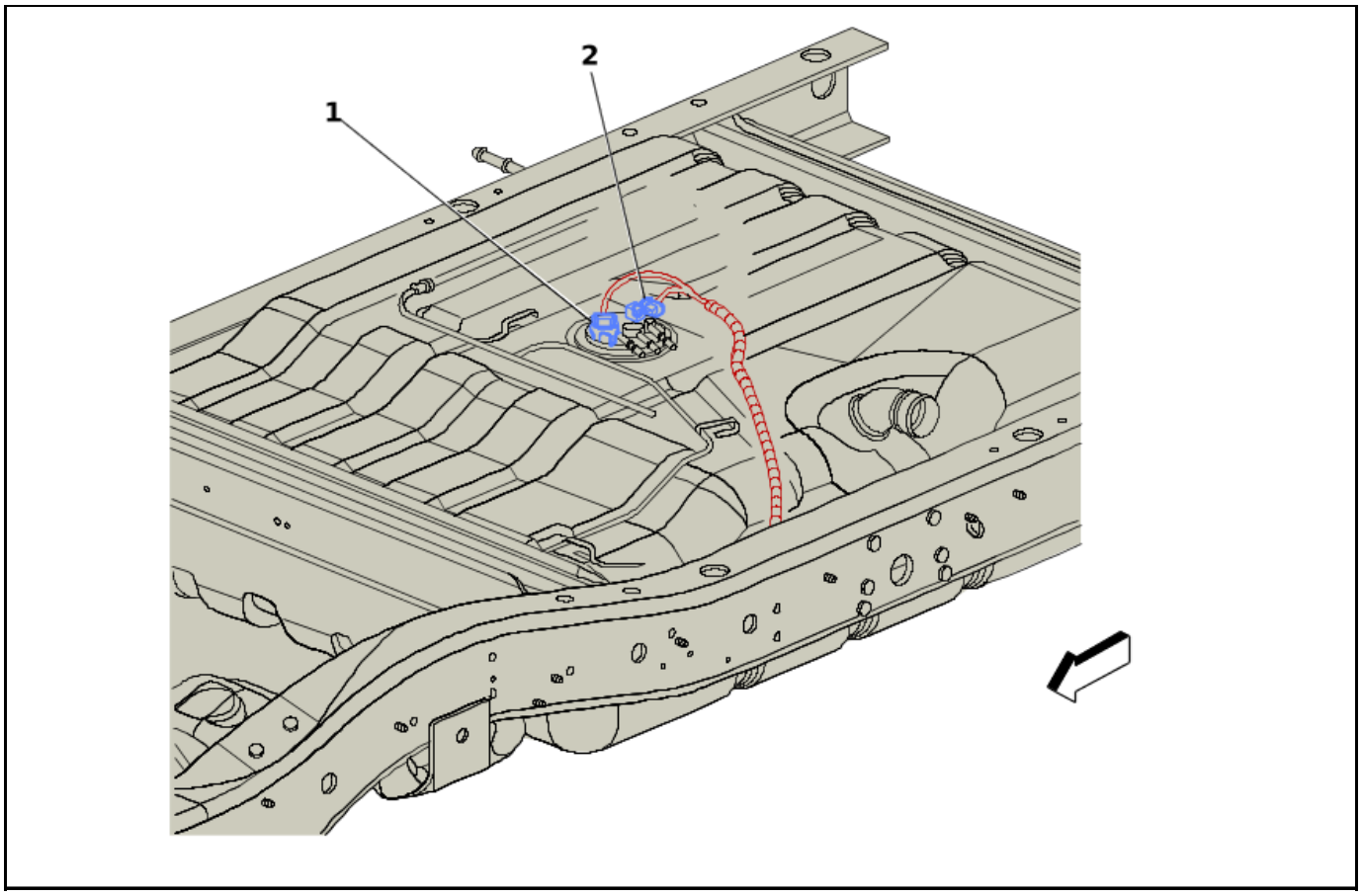
2831324

Items

(1) A7 Fuel Pump and Level Sensor Assembly

(2) B150 Fuel Tank Pressure Sensor

Fuel Tank Components (NE7)



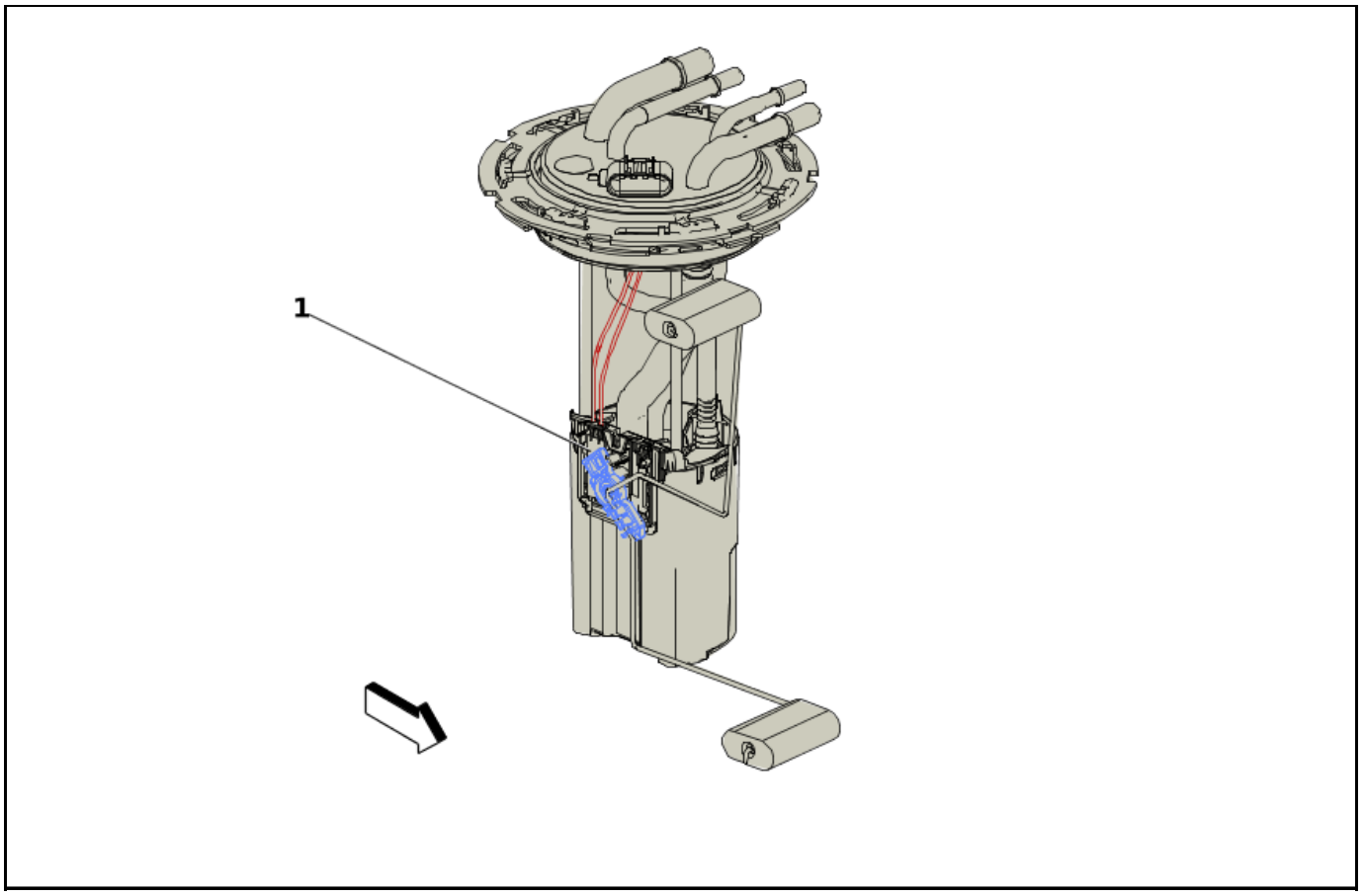
2831321

Items

(1) B150 Fuel Tank Pressure Sensor

(2) A7 Fuel Pump and Level Sensor Assembly

Inside of Fuel Tank Components

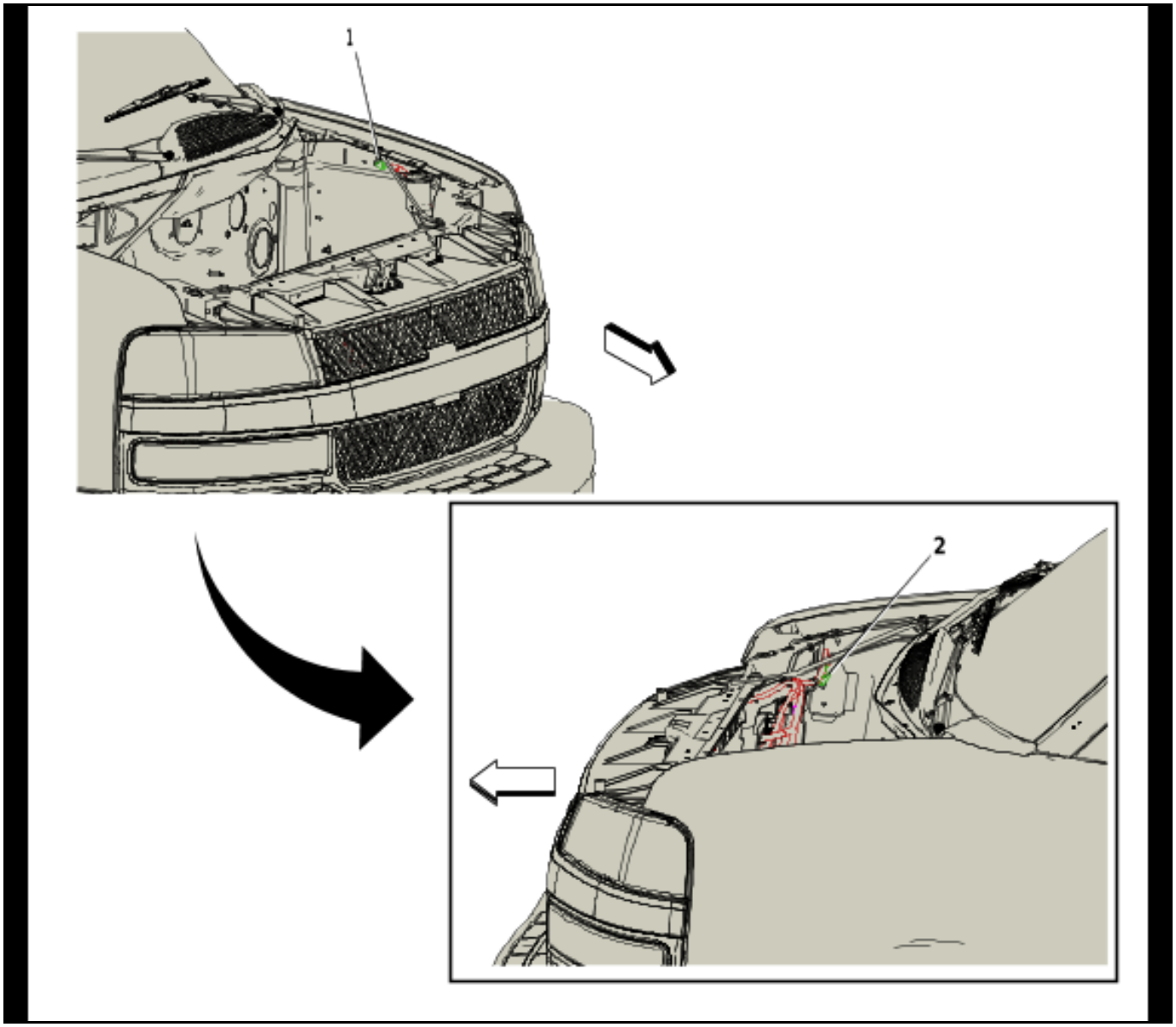


2831317

Items

(1) B46 Fuel Level Sensor

Ground Views
G100 and G101

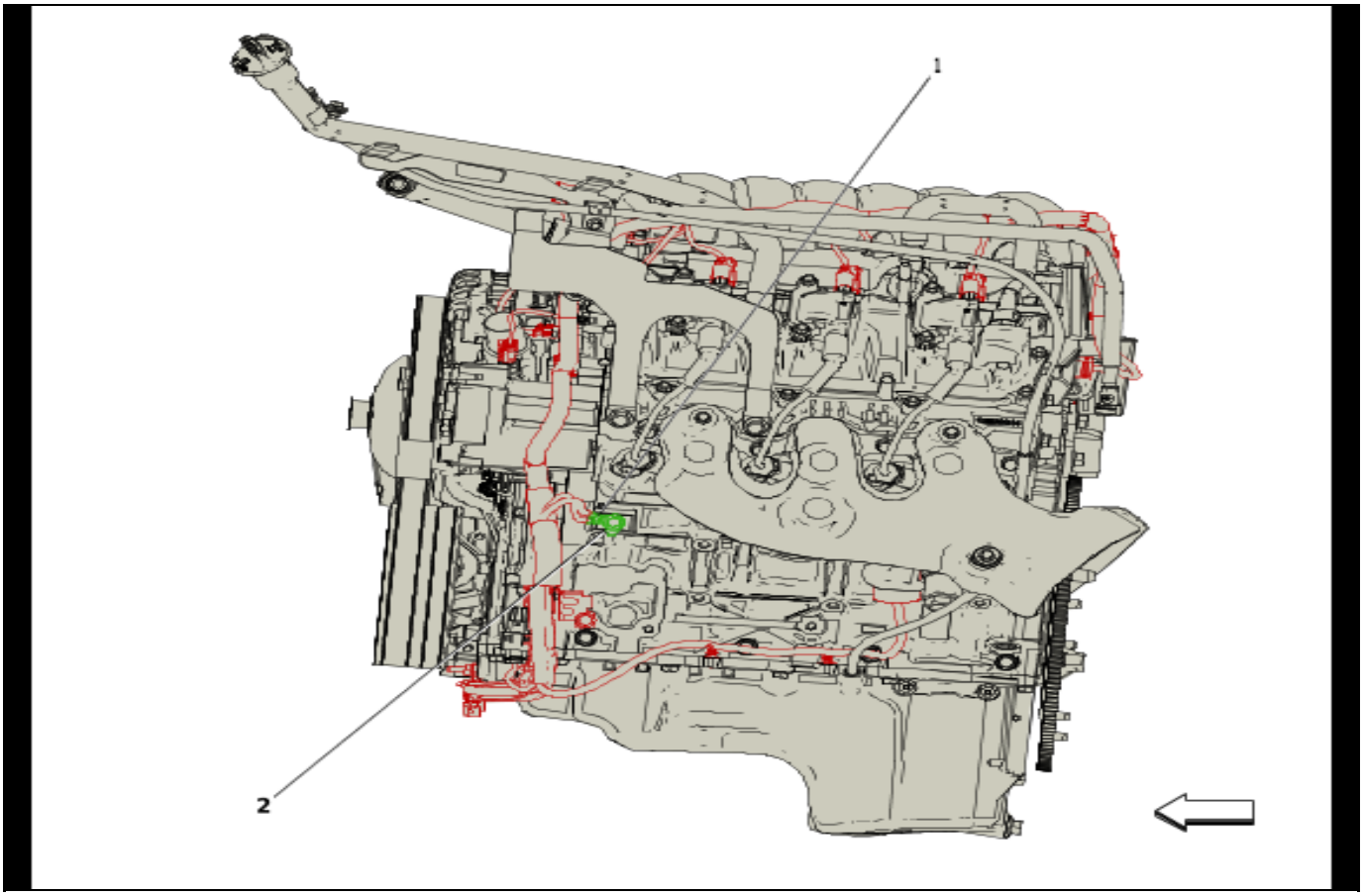


6040687

Items

(1) G100 Forward Lamp Wiring Harness
(2) G101 Forward Lamp Wiring Harness

G102 and G103 (LV1)



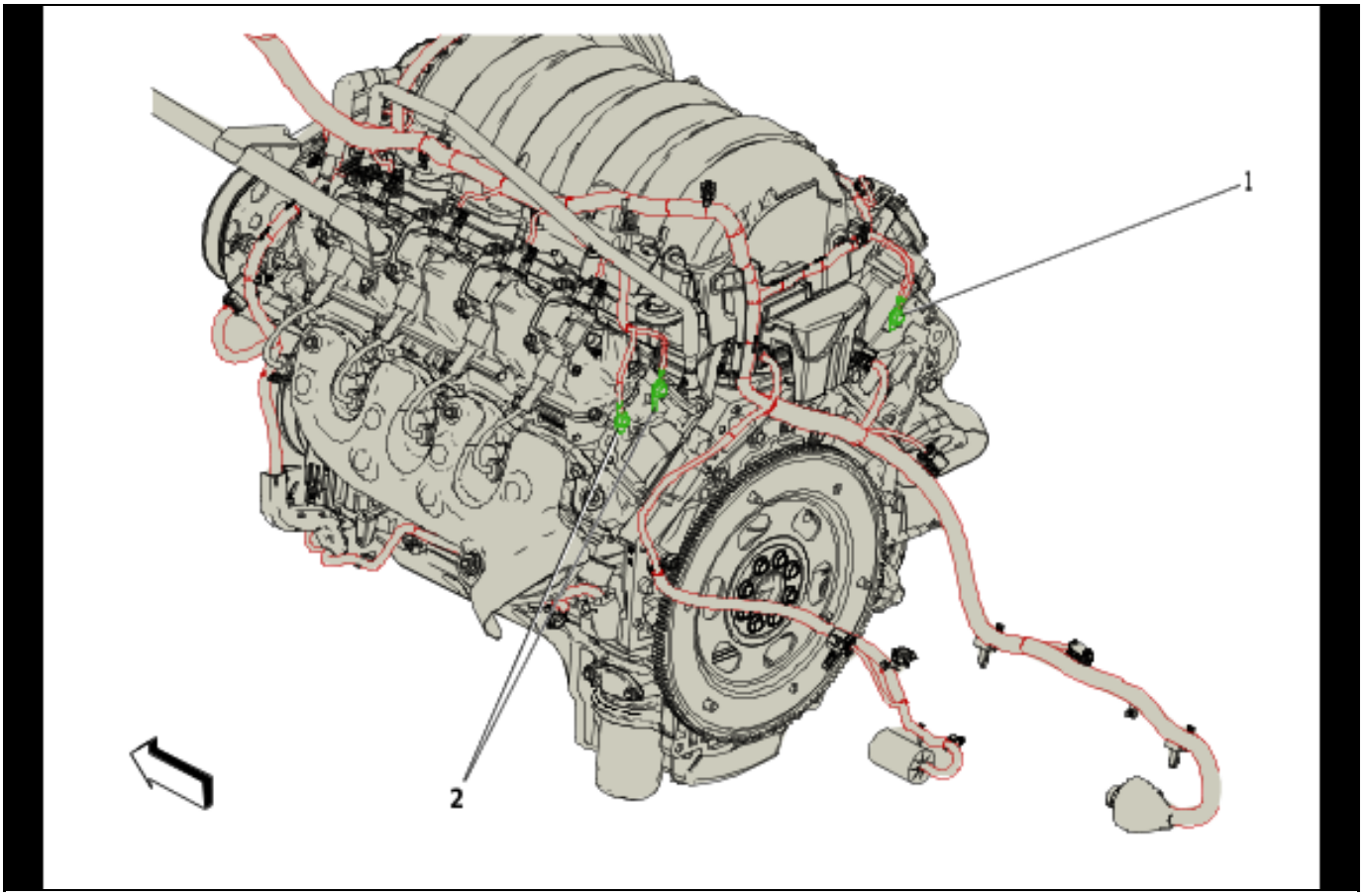
6003033

Items

(1) G102 Engine Wiring Harness

(2) G103 Engine Wiring Harness

G102 and G103 (L8T)



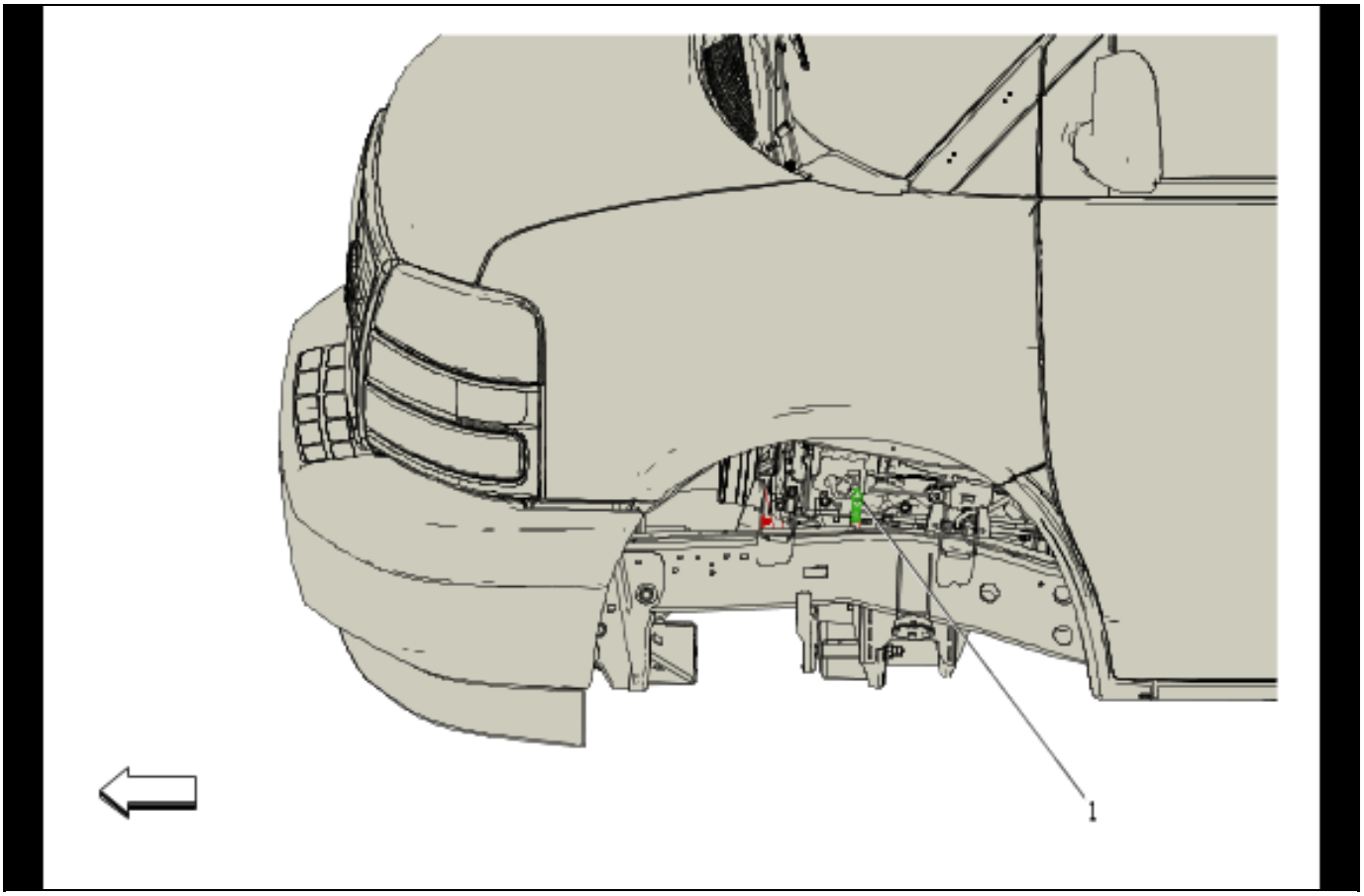
6040688

Items

(1) G102 Engine Wiring Harness

(2) G103 Engine Wiring Harness

G104 (LV1)

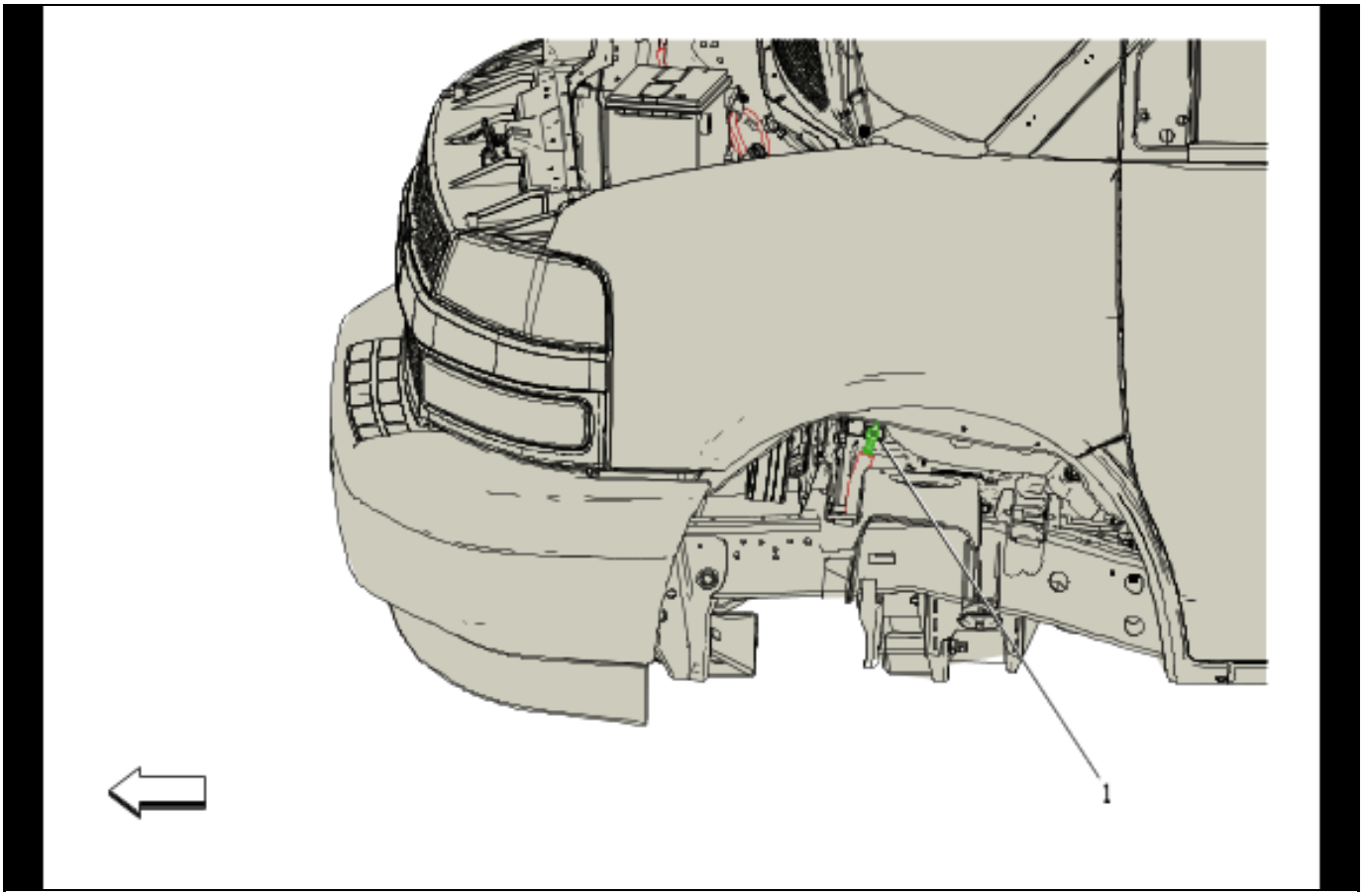


6040689

Items

(1) G104 Negative Battery Cable

G104 (L8T)

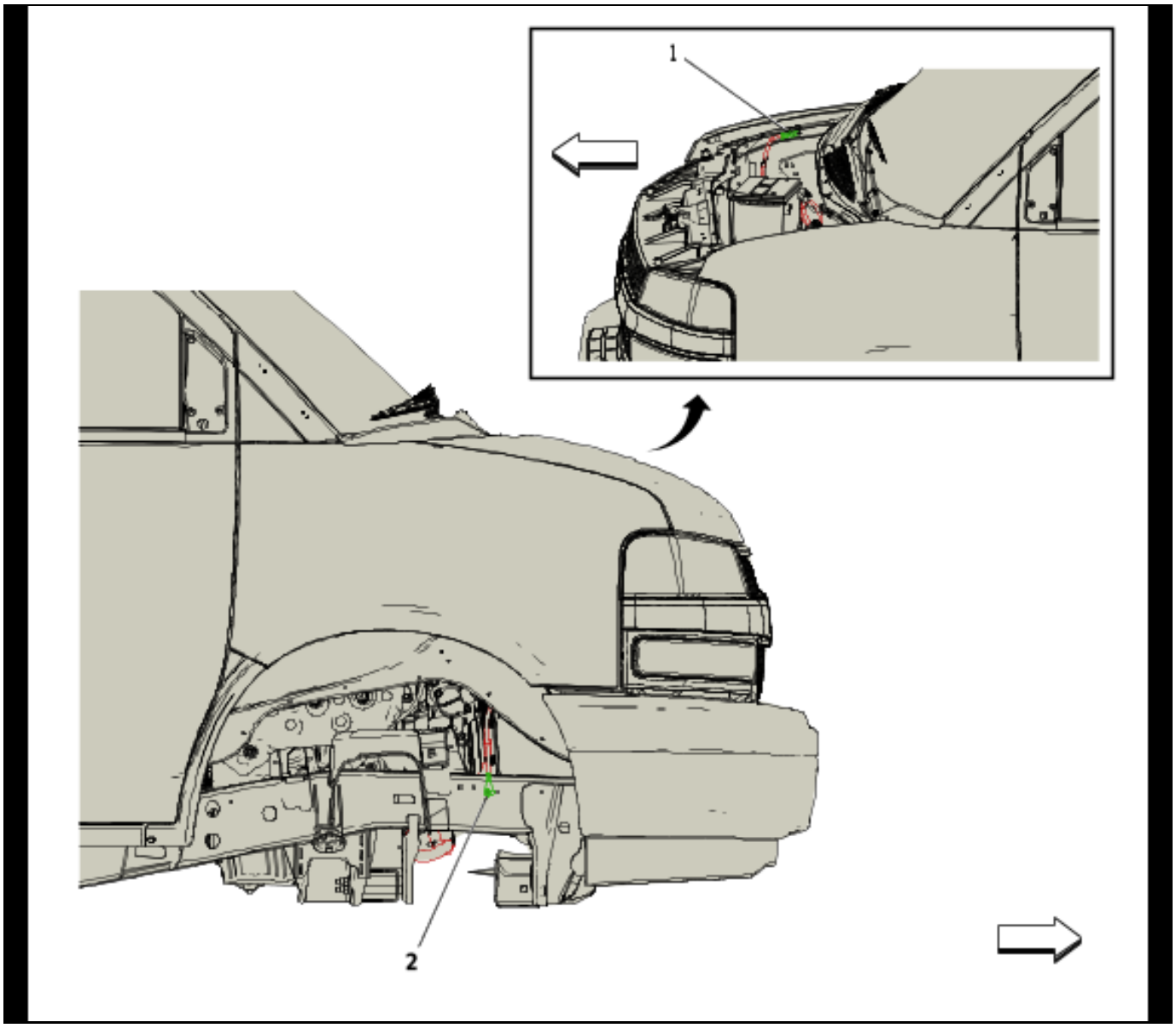


6040690

Items

(1) G104 Negative Battery Cable

G105 and G106



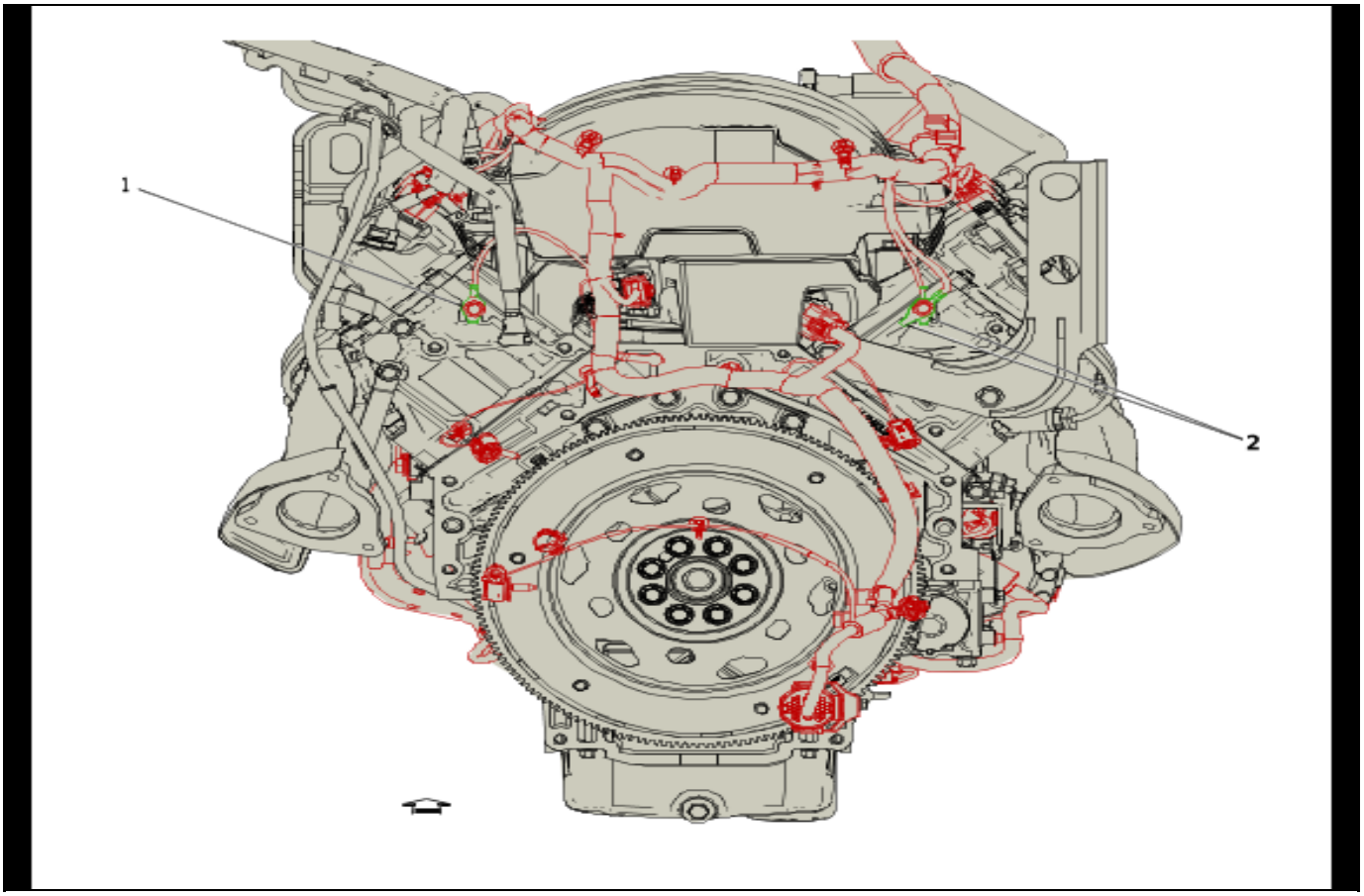
6040692

Items

(1) G106 Negative Battery Cable

(2) G105 Negative Battery Cable

G107 and G108 (LV1)



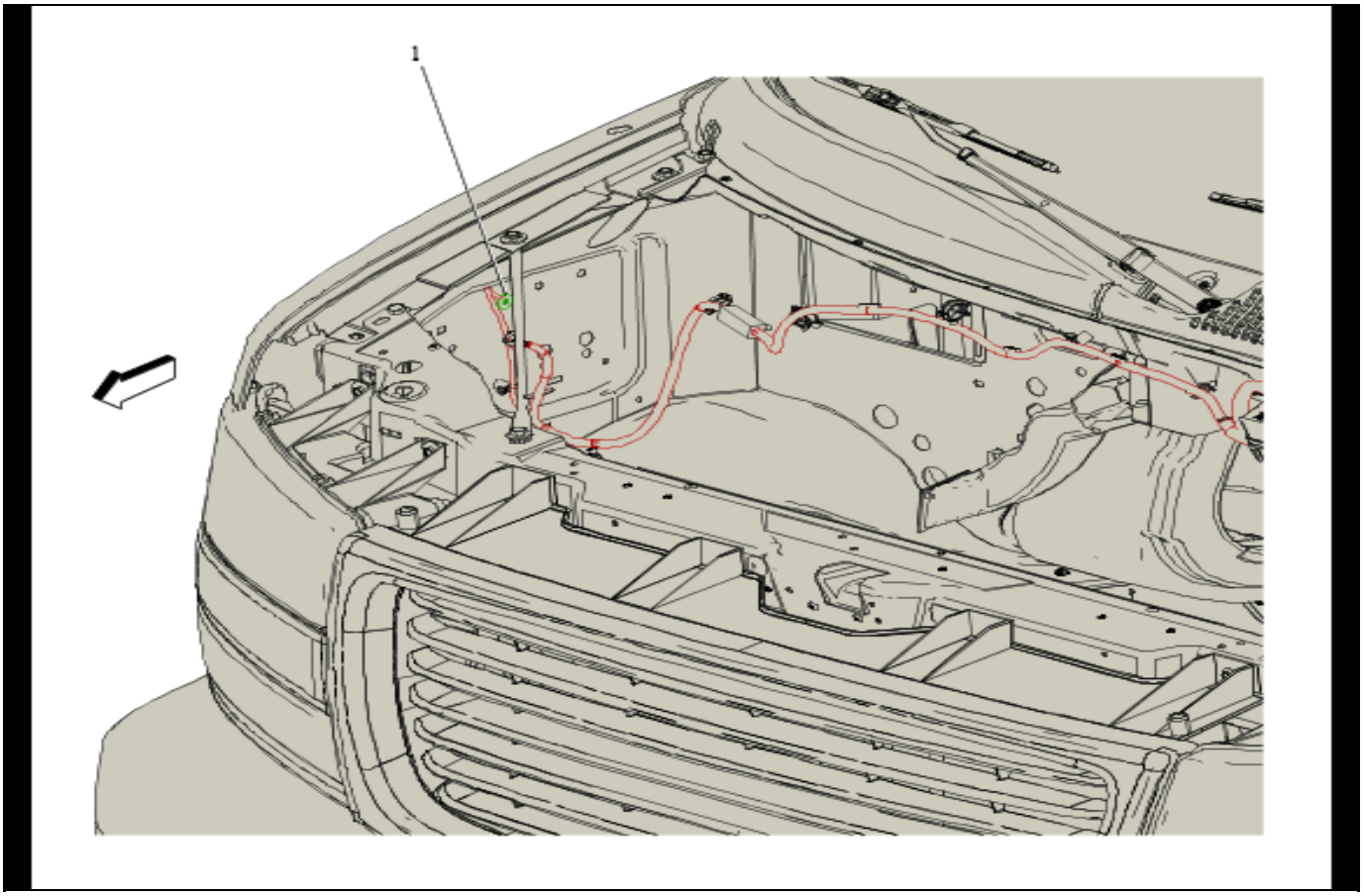
6003035

Items

(1) G107 Engine Wiring Harness (LV1)

(2) G108 Engine Wiring Harness

G109 (9L7)

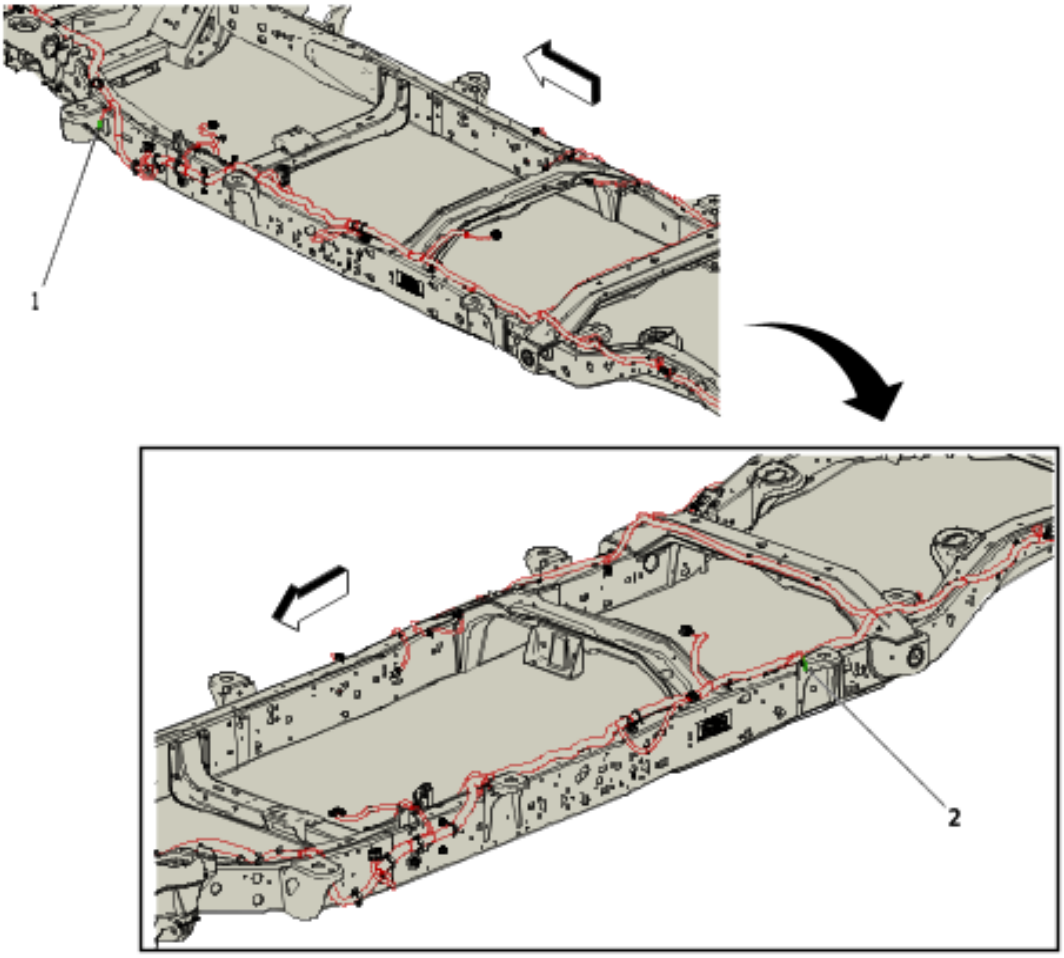


6003036

Items

(1) G109 Accessory Wiring Harness (9L7)

G300 and G404 (Passenger or Cargo)

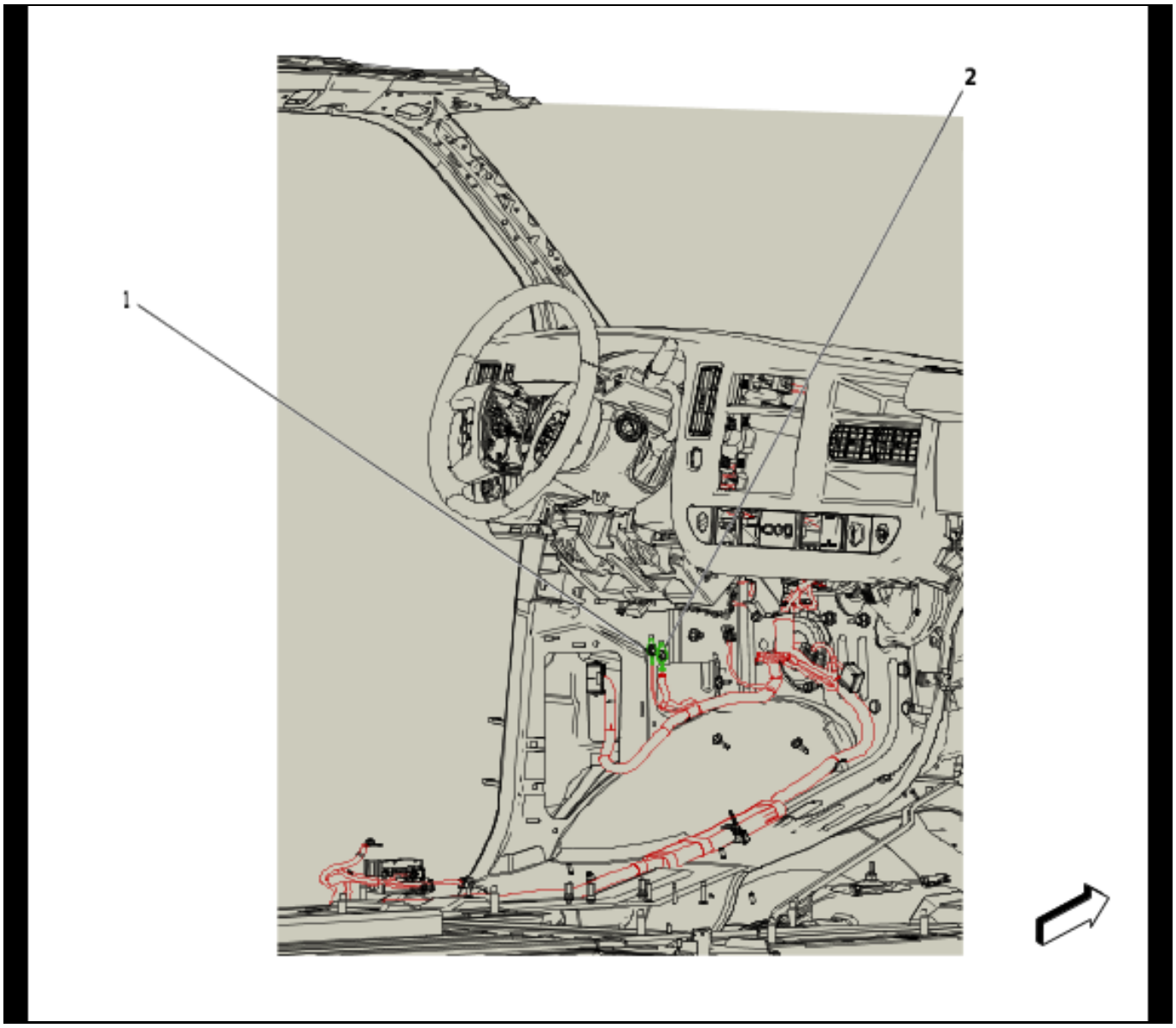


6087091

Items

(1) G300 Chassis Wiring Harness
(2) G404 Chassis Wiring Harness

G301 and G302



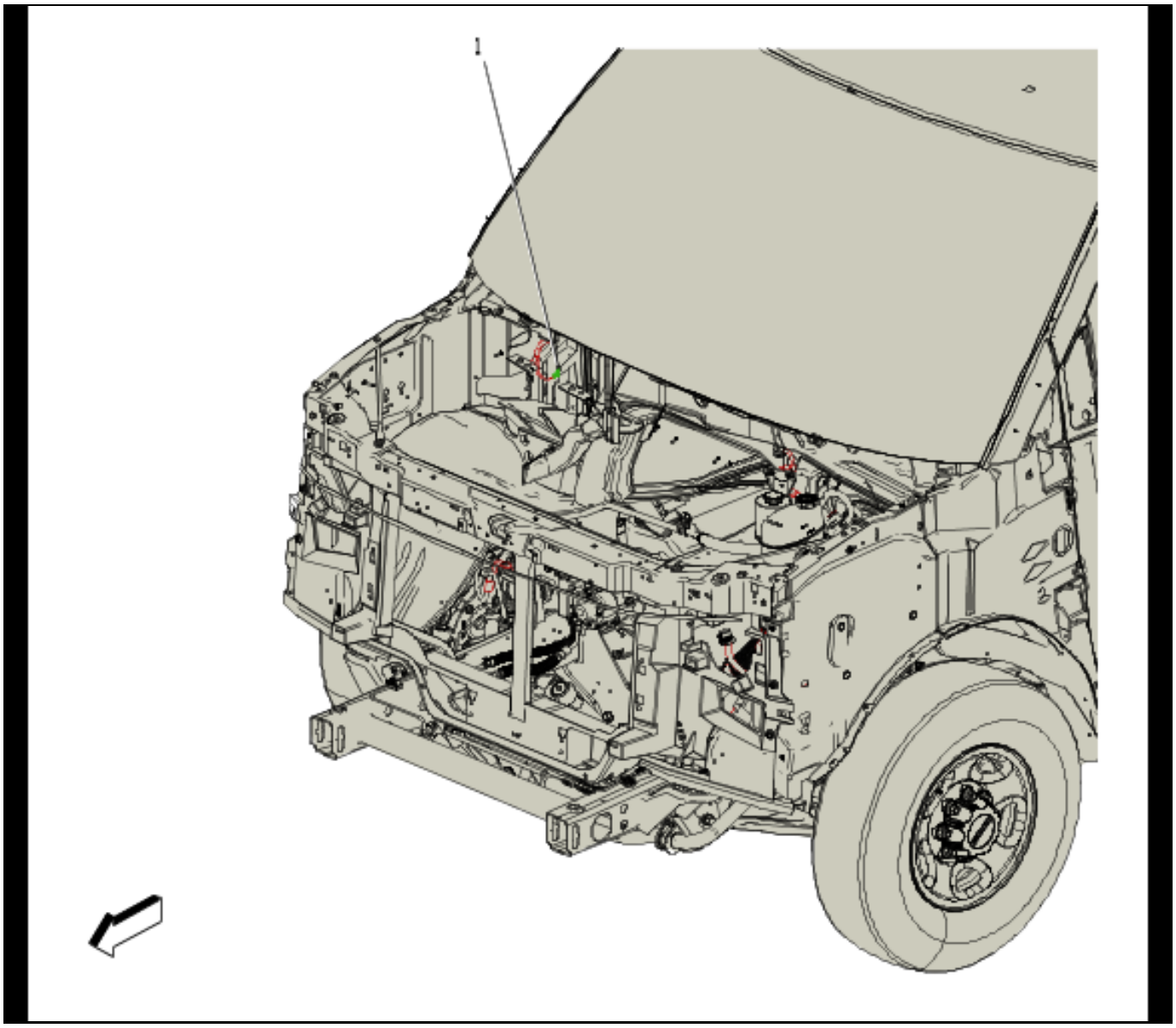
6043576

Items

(1) G301 Instrument Panel

(2) G302 Instrument Panel

G304

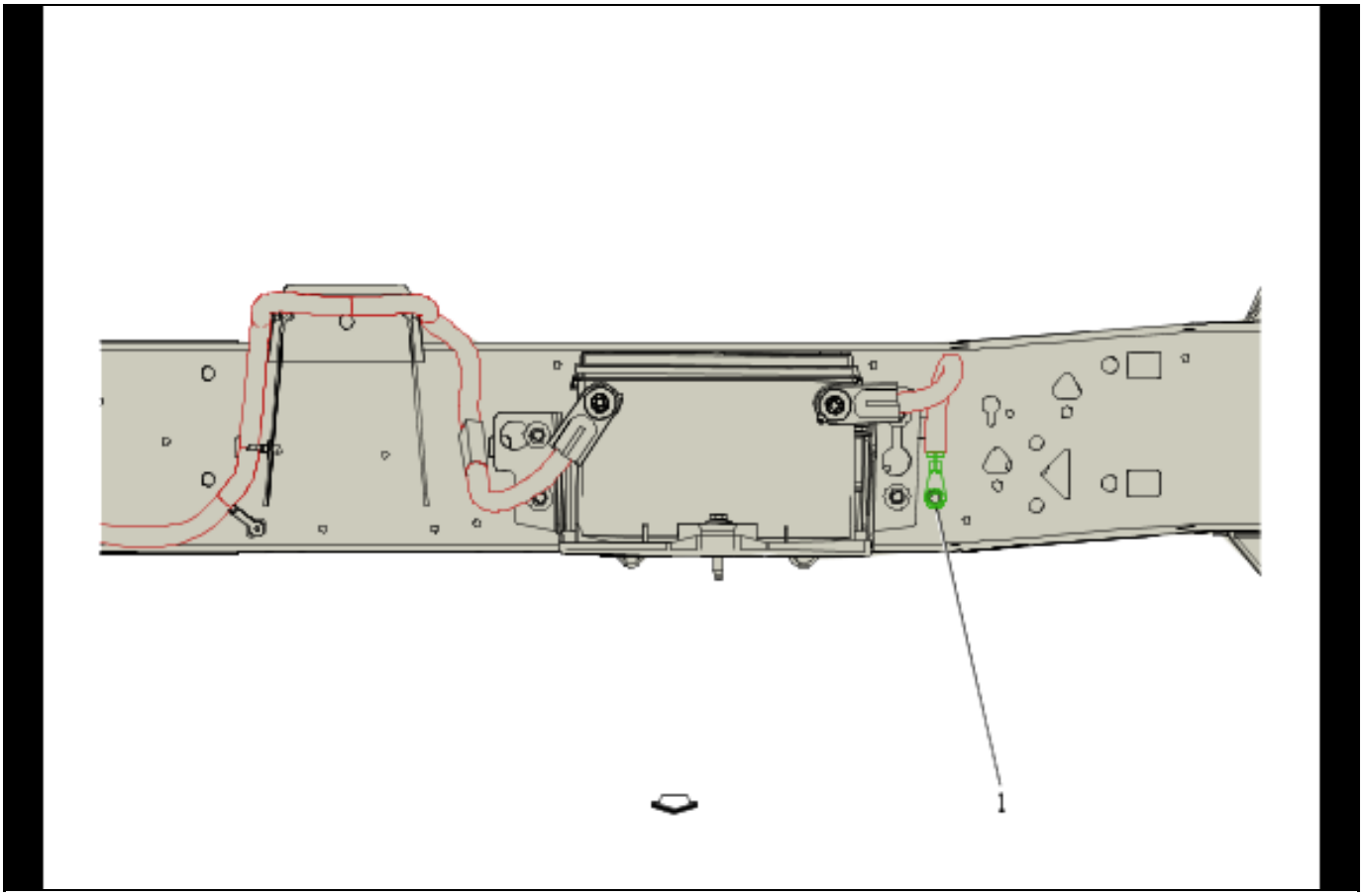


6043578

Items

(1) G304 Instrument Panel

G305

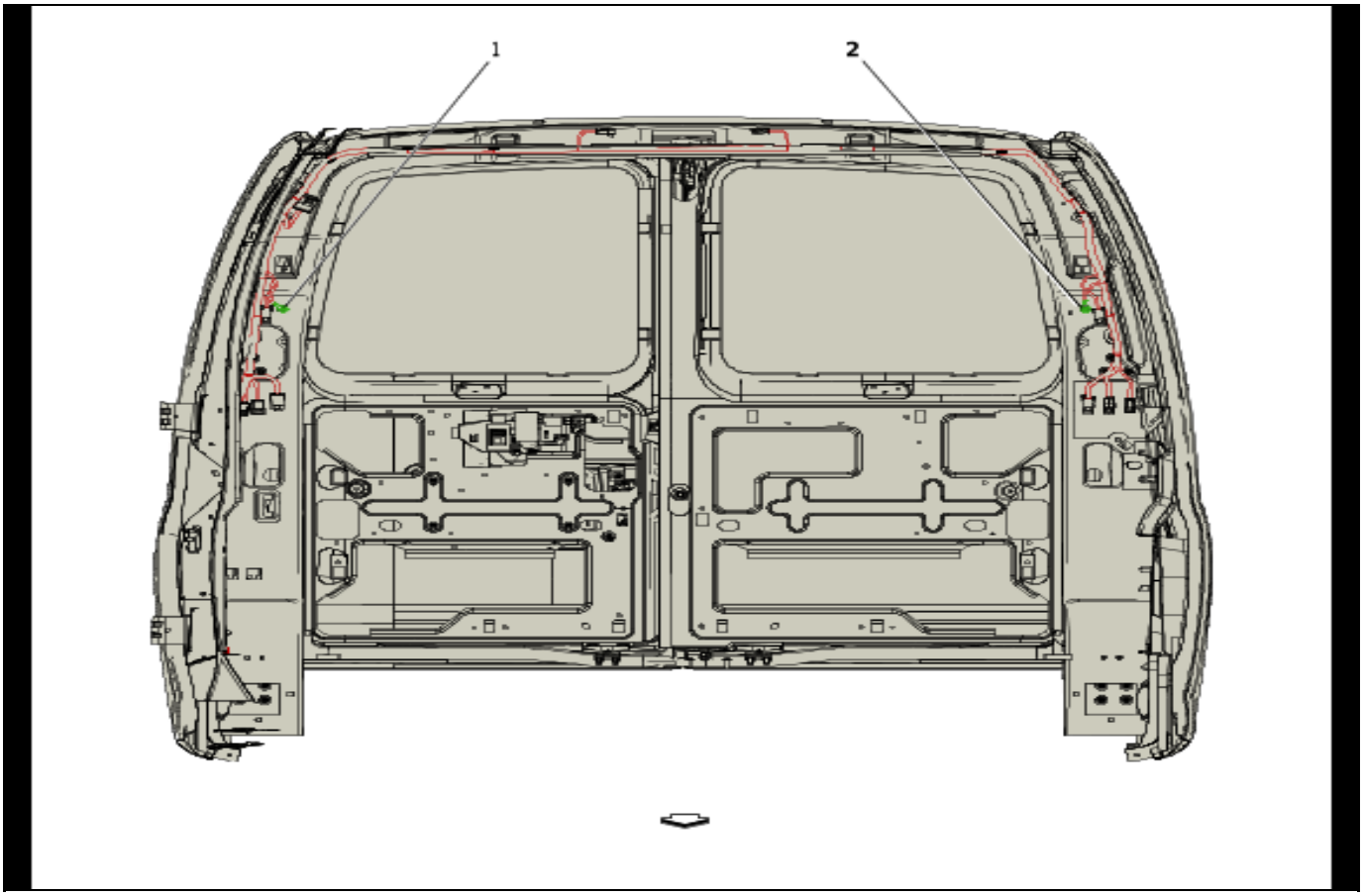


6040693

Items

(1) G305 Auxiliary Battery Negative Cable (TP3)

G401 and G402 (Passenger or Cargo)



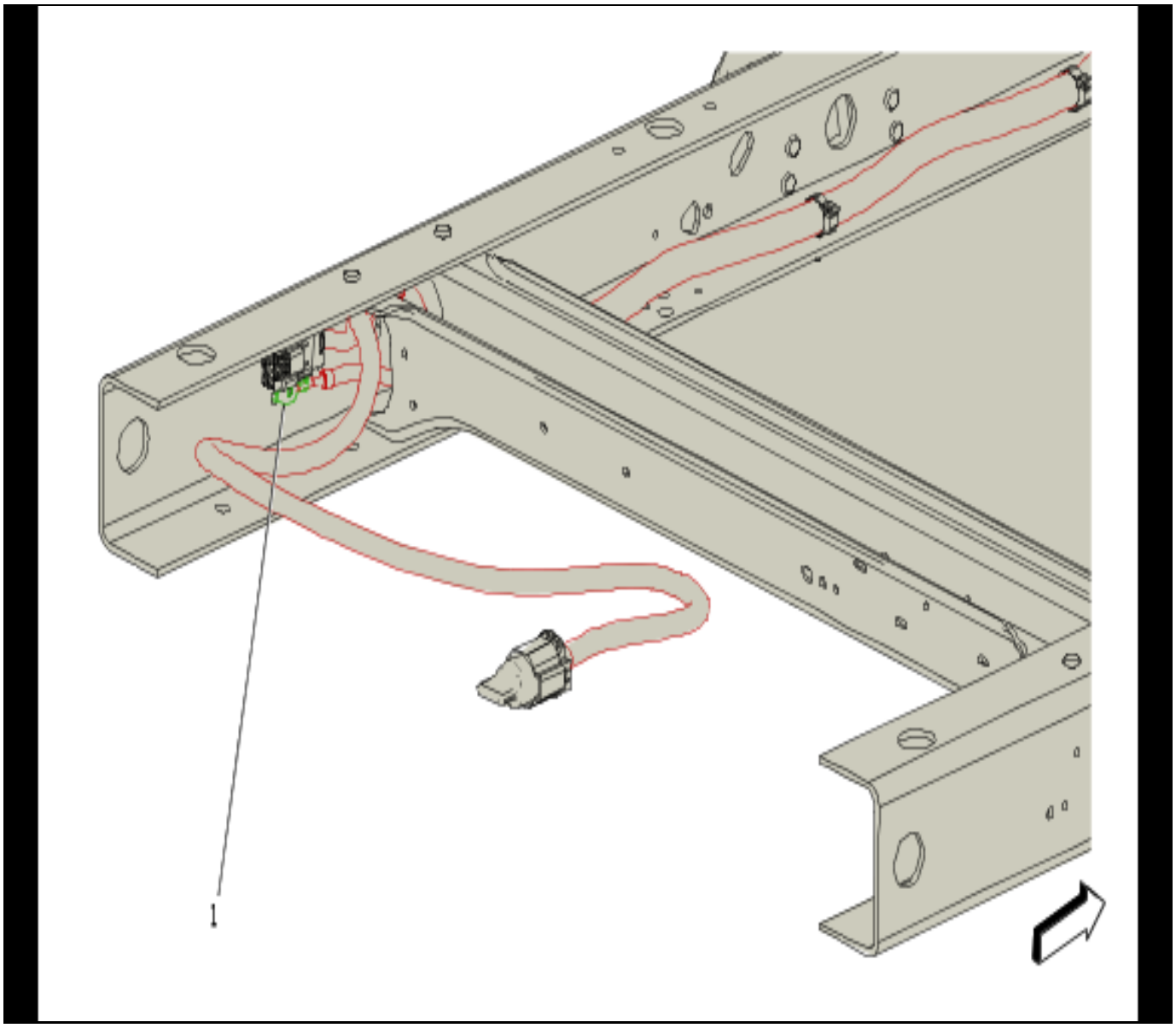
6003038

Items

(1) G401 Body Wiring Harness (Passenger/Cargo)

(2) G402 Body Wiring Harness (Passenger/Cargo)

G404 (Cutaway)



6003085

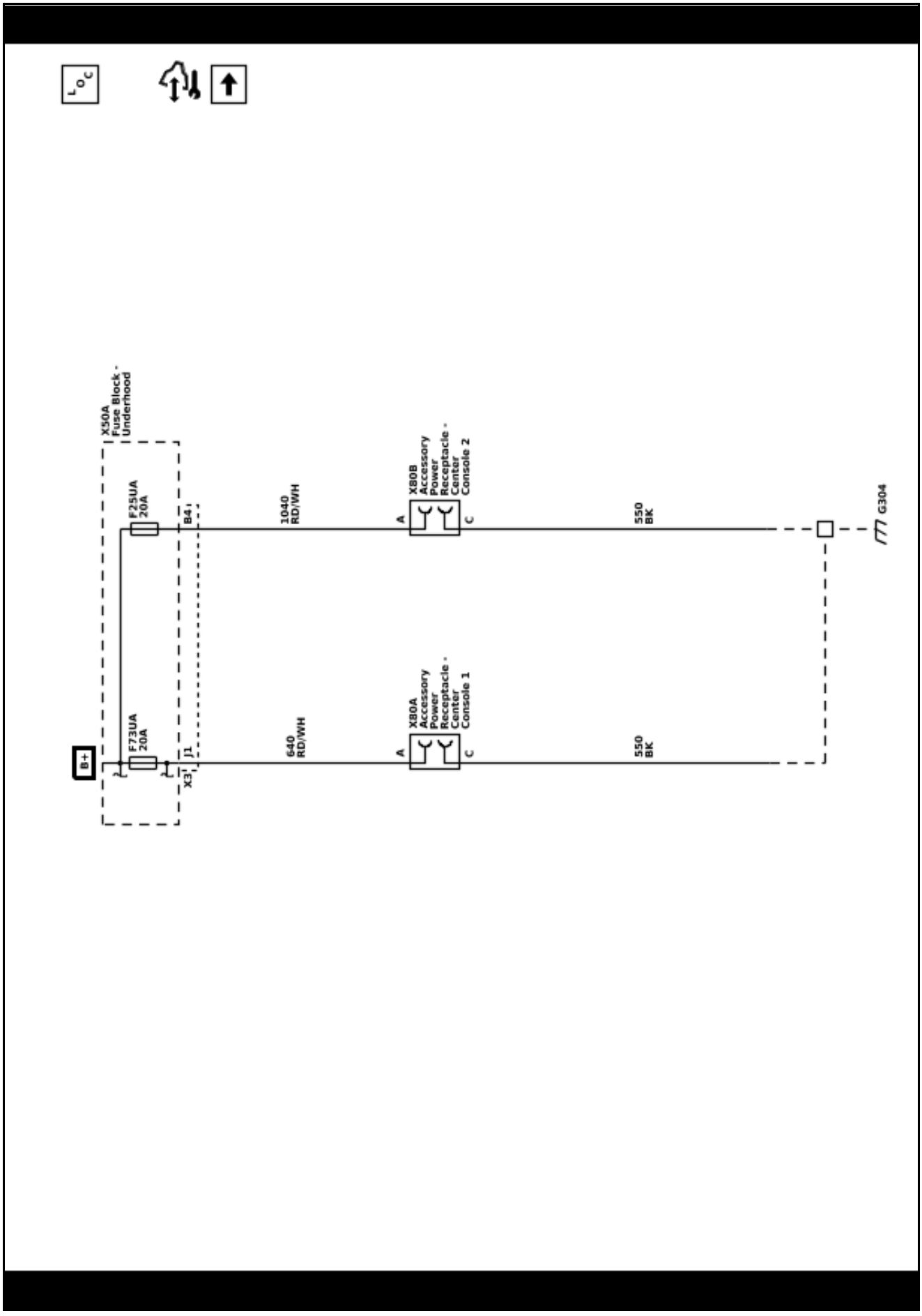
Items

(1) G404 Chassis Wiring Harness

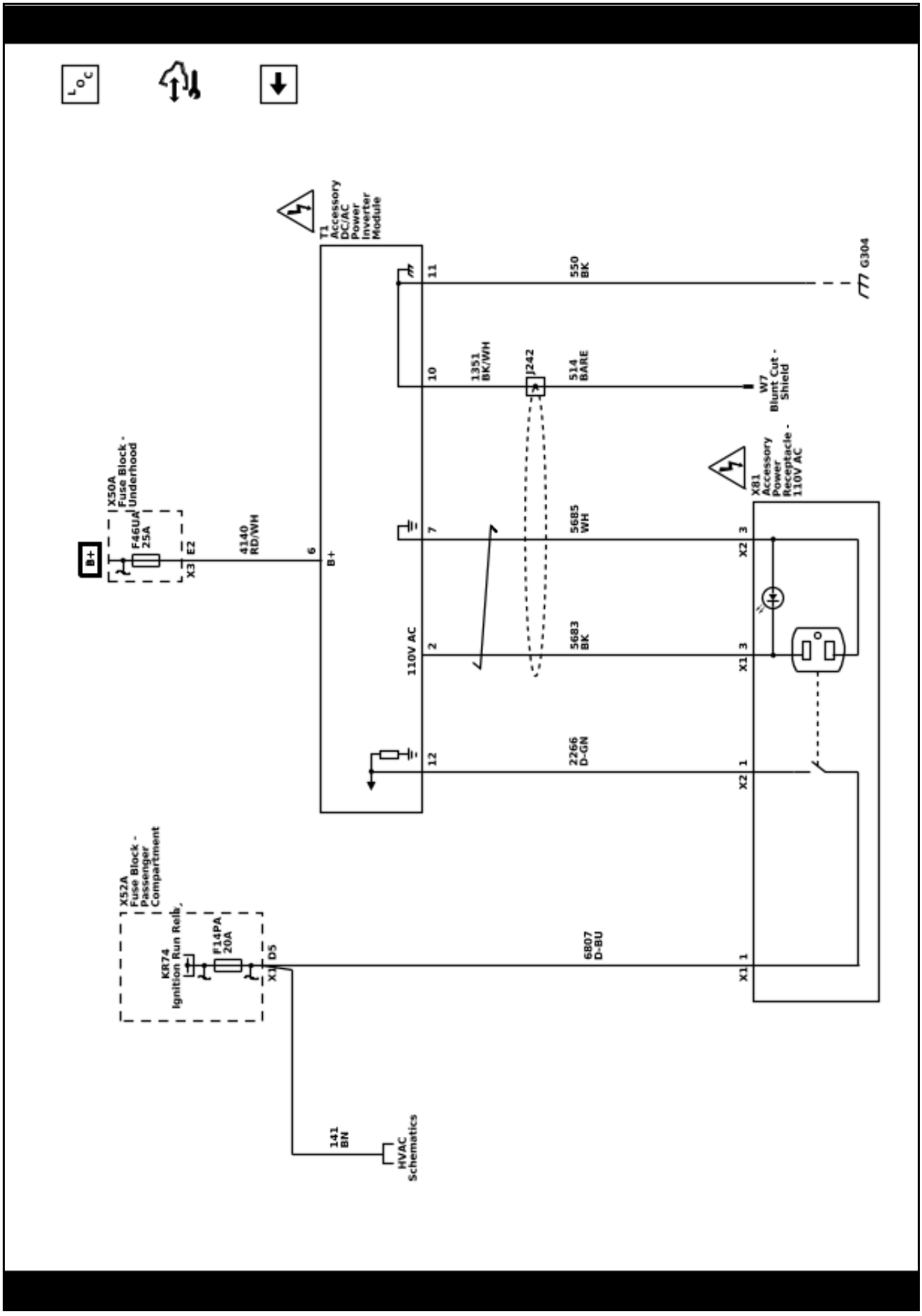
Power Outlets

Schematic and Routing Diagrams

Cigar Lighter/Power Outlet Schematics (Cigar Lighter/Power Outlet)



Cigar Lighter/Power Outlet Schematics (110V AC Outlet (KI4))



Description and Operation

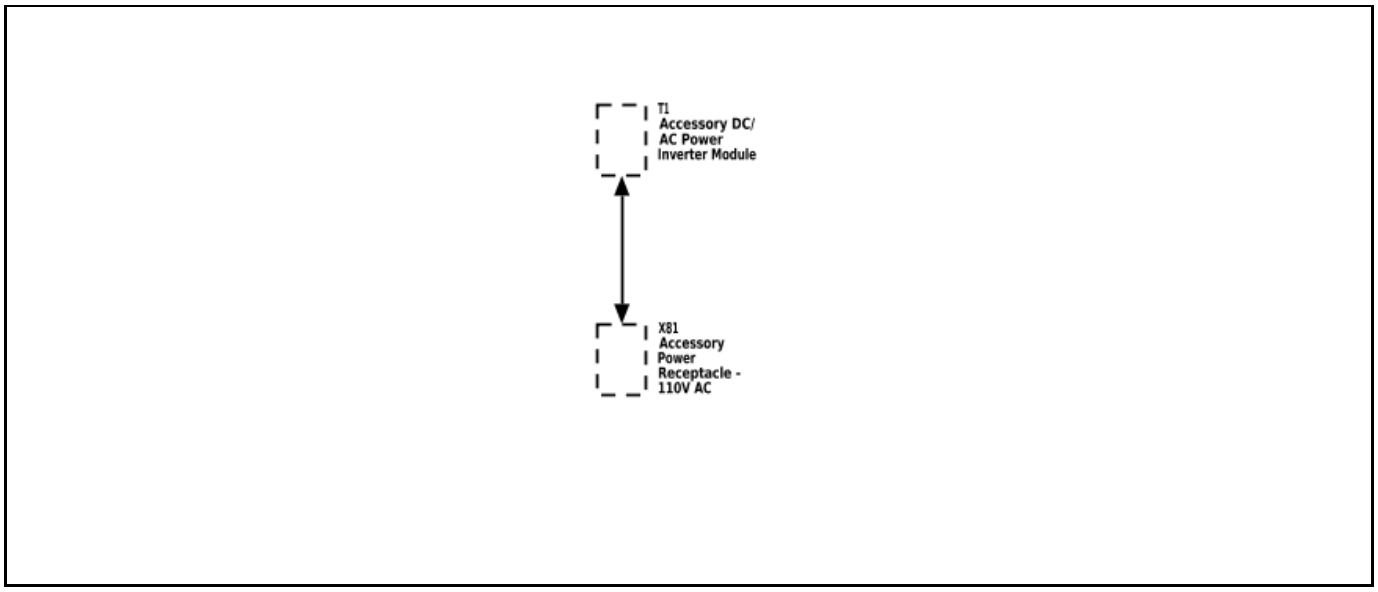
Power Outlets Description and Operation

12 Volt Power Outlet Receptacle Description and Operation

The 12 V accessory power receptacles are supplied B+ all the time.

110 Volt Power Outlet Receptacle System Description

Power Outlets Block Diagram



3403851

The alternating current (AC) accessory power outlet system consists of the accessory DC/AC power inverter module and the accessory power receptacle – 110 V AC. The accessory DC/AC power inverter module converts 12 V direct current (DC) battery power to 110 V at 60 Hertz (Hz) AC power to operate AC powered devices. The accessory DC/AC power inverter module provides up to 150 watts of power. The accessory power receptacle – 110 V AC provides the usual connection for AC powered devices.

110 Volt Power Outlet Receptacle System Operation

The accessory DC/AC power inverter module receives fuse protected battery voltage and is connected to the 12 V electrical system ground. The accessory power receptacle – 110 V AC has an internal switch, that detects when an AC powered device is plugged into the outlet. When the ignition is ON, and an AC powered device is plugged into the accessory power receptacle – 110 V AC, the normally open switch in the accessory power receptacle – 110 V AC, closes. When the accessory DC/AC power inverter module detects the voltage from the accessory power receptacle – 110 V AC switch, the inverter module begins to supply 110 V AC to the accessory power receptacle – 110 V AC after a 1.5 second delay. The accessory AC power system is protected against circuit overload and circuit shorts to ground.

110 Volt Power Outlet Receptacle Isolation Fault Protection

The accessory DC/AC power inverter module contains a ground fault circuit interrupter (GFCI). GFCI monitors the 110 V circuit for a short to vehicle chassis ground. If a 110 V AC short to ground is detected, the accessory DC/AC power inverter module will turn OFF. The module remains OFF, until the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 second delay.

110 Volt Power Outlet Receptacle Overload Shutdown

The accessory DC/AC power inverter module will turn OFF if the current in the 110 V circuit is greater than 3.8 A for 1 second, or 2.5 A for 10 seconds. The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 second delay.

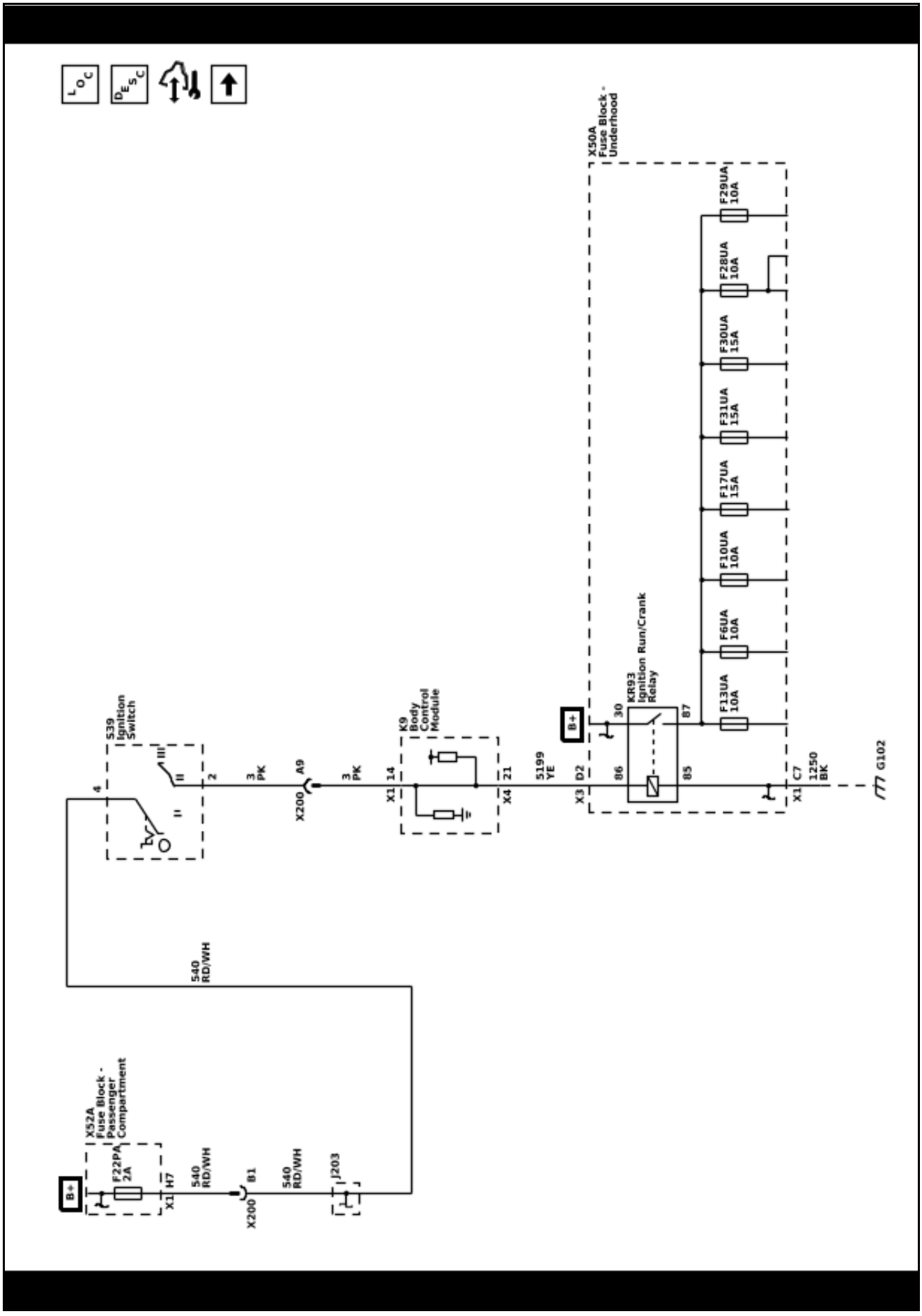
110 Volt Power Outlet Receptacle Internal Shutdown

The accessory DC/AC power inverter module will turn OFF if the B+ supply voltage is greater than 16.5 V or less than 11 V. The module will also turn OFF if the device temperature is greater than 85°C (185°F). The module will turn ON again, after the shutdown condition is corrected, and the AC powered device is unplugged from the outlet, and then plugged into the outlet.

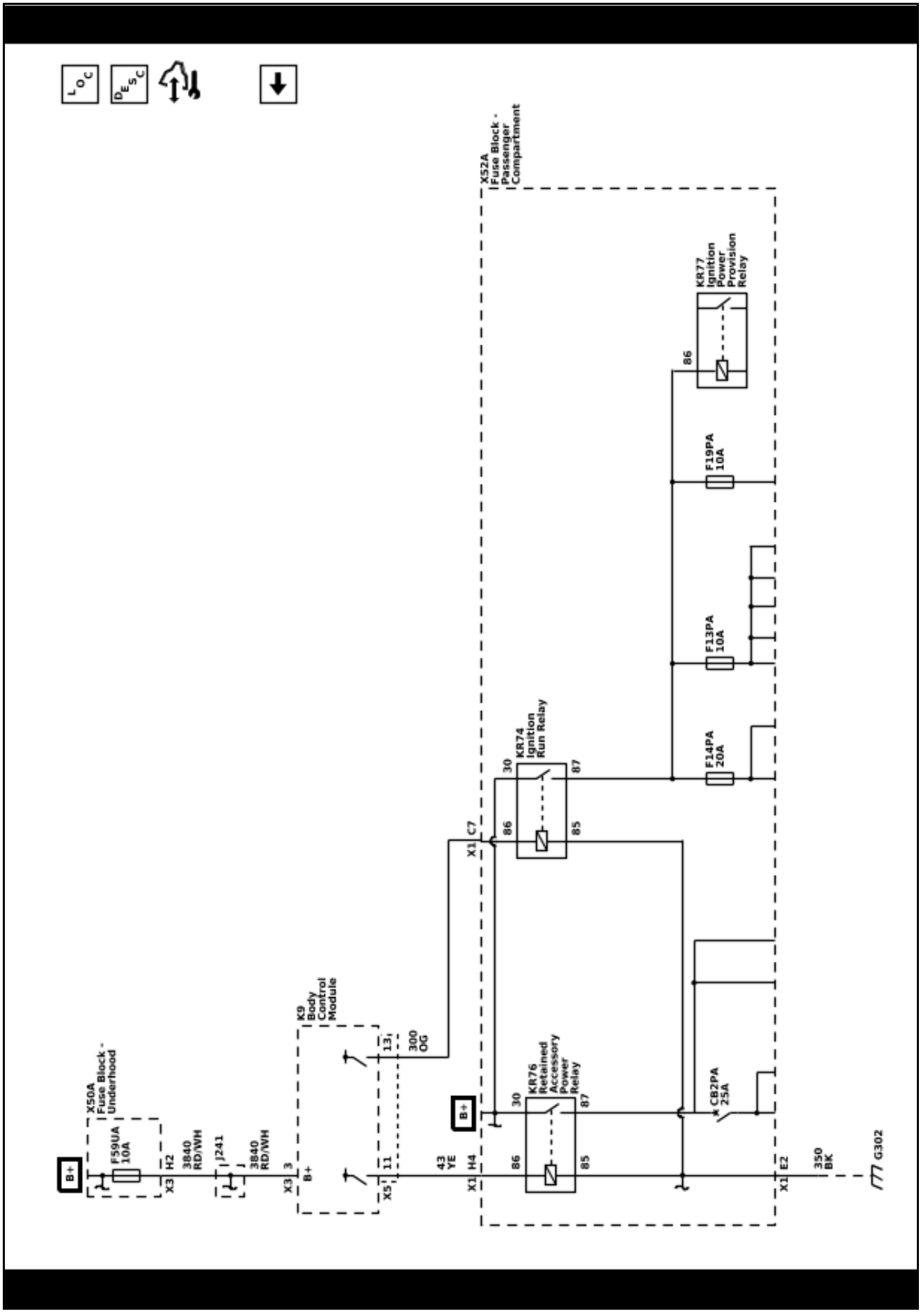
Wiring Systems and Power Management

Schematic and Routing Diagrams

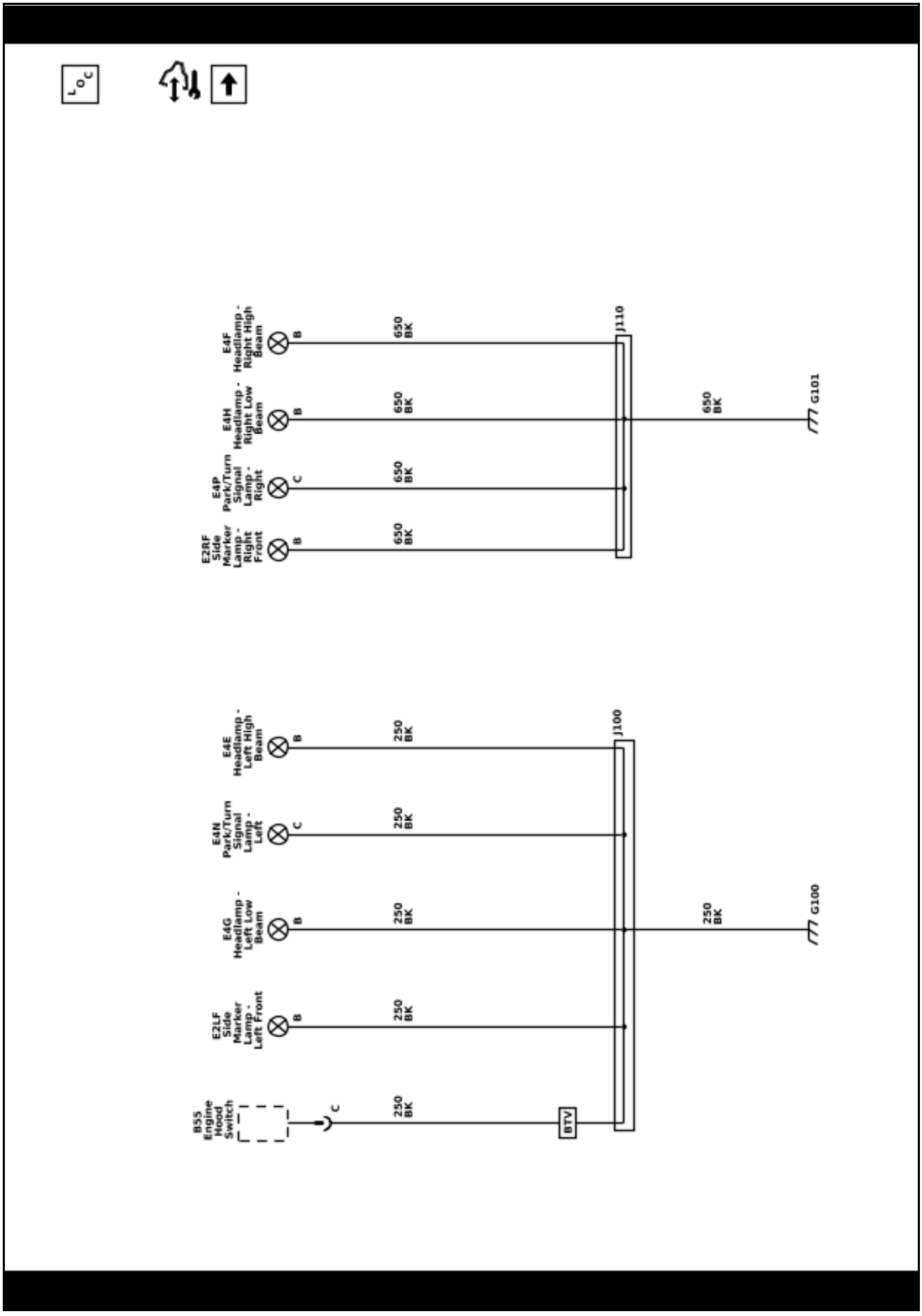
Power Moding Schematics (Ignition Run/Crank Relay)



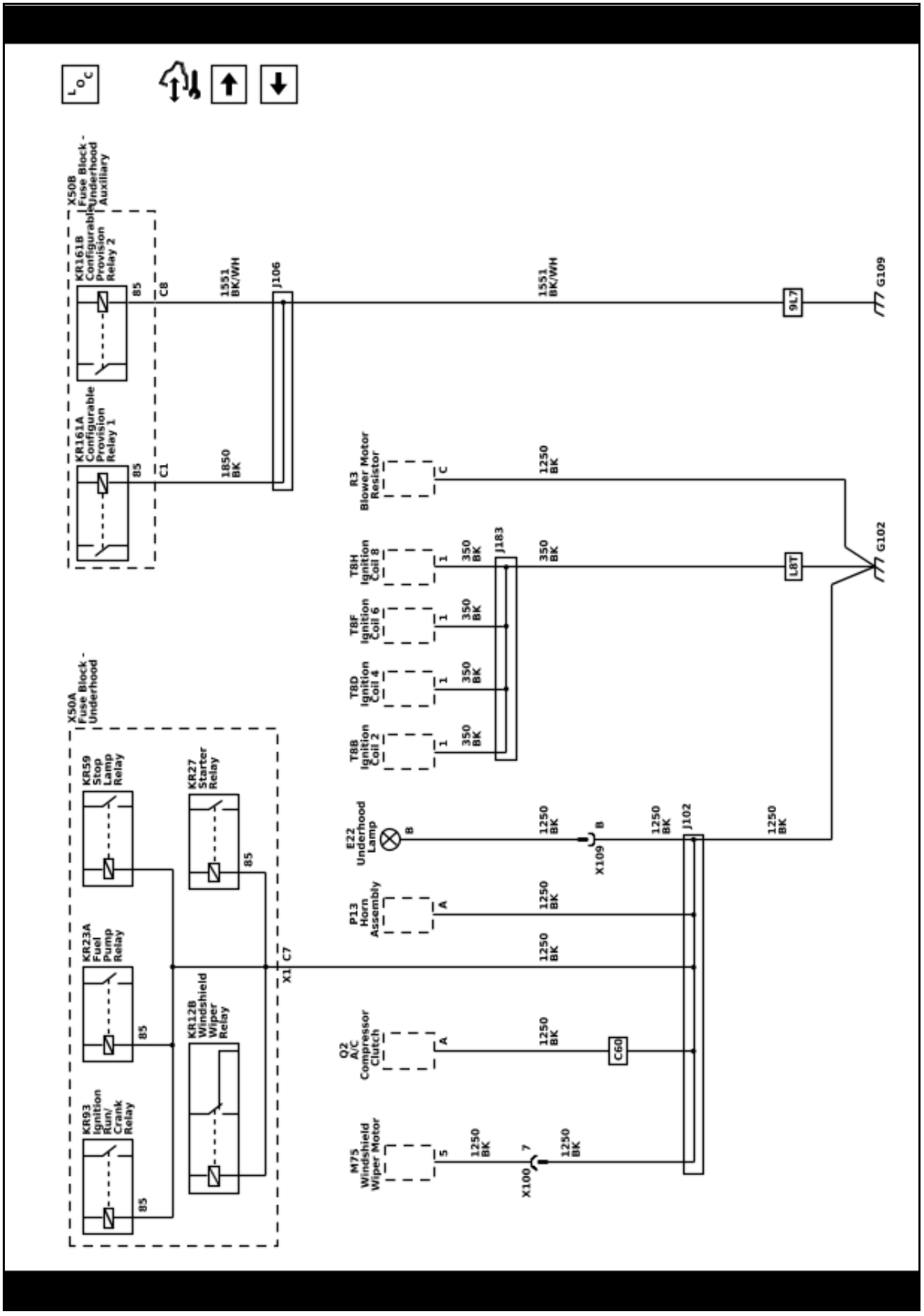
Power Moding Schematics (Retained Accessory Power Relay and Ignition Run Relay)



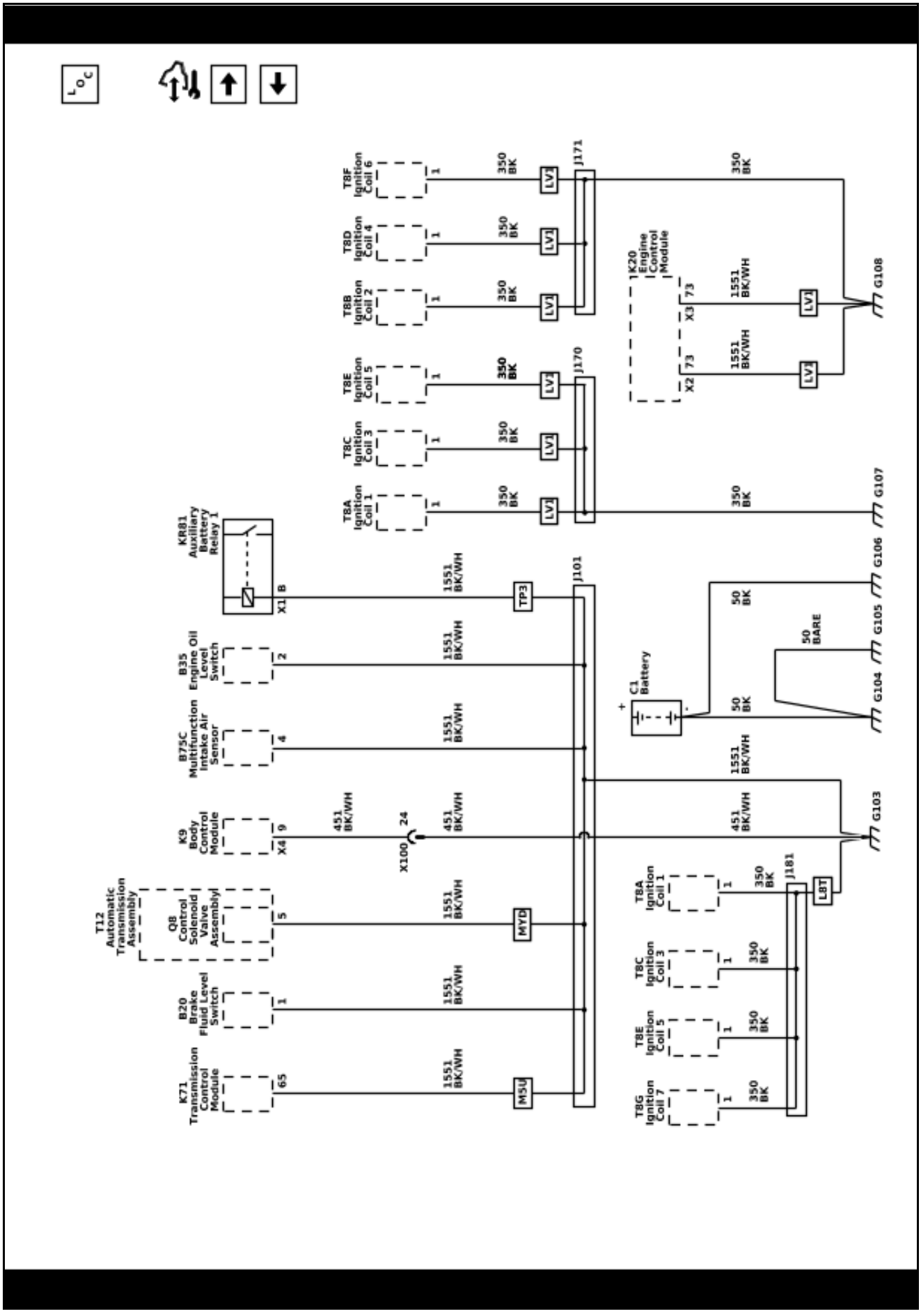
Ground Distribution Schematics (G100 and G101)



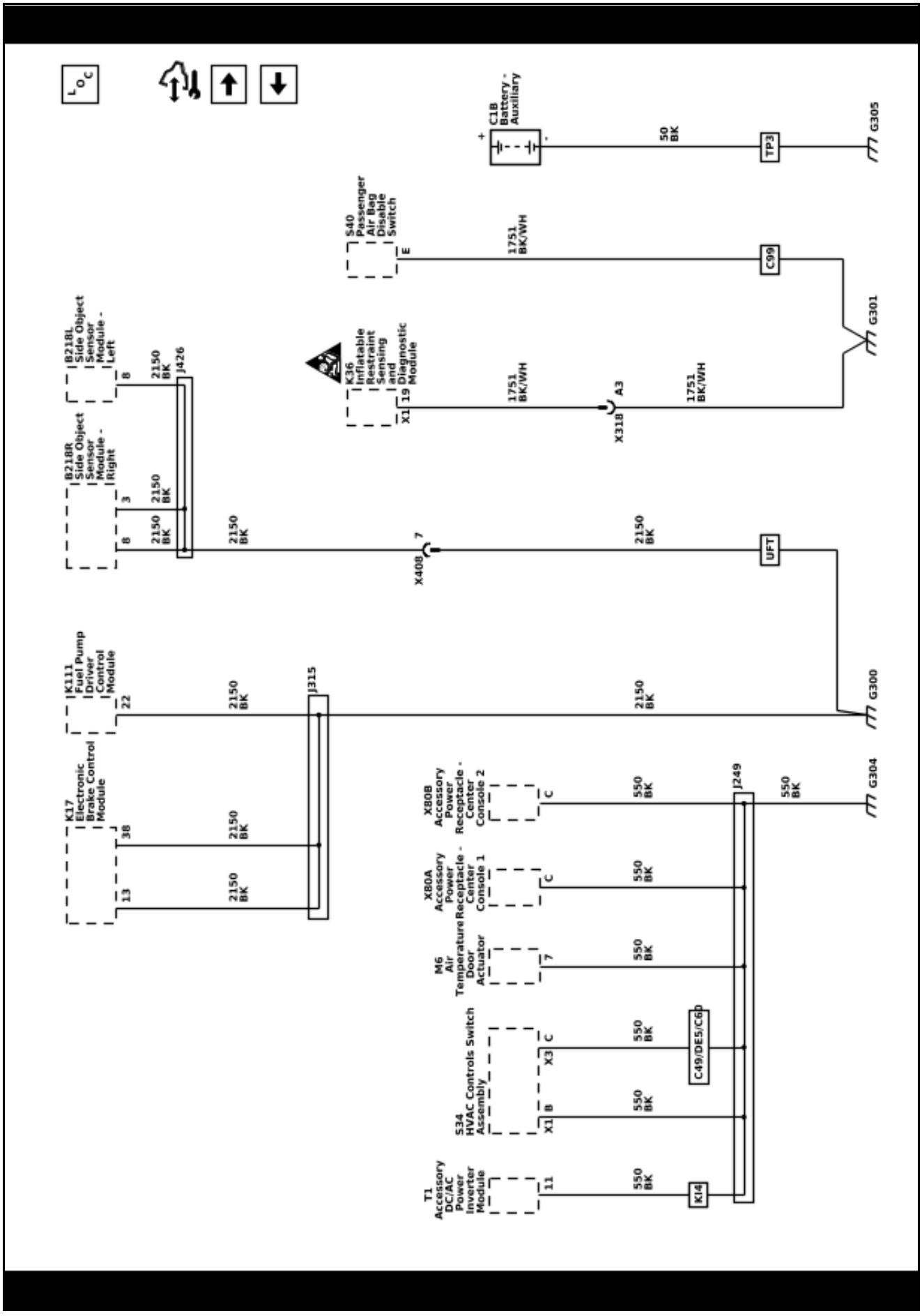
Ground Distribution Schematics (G102 and G109)



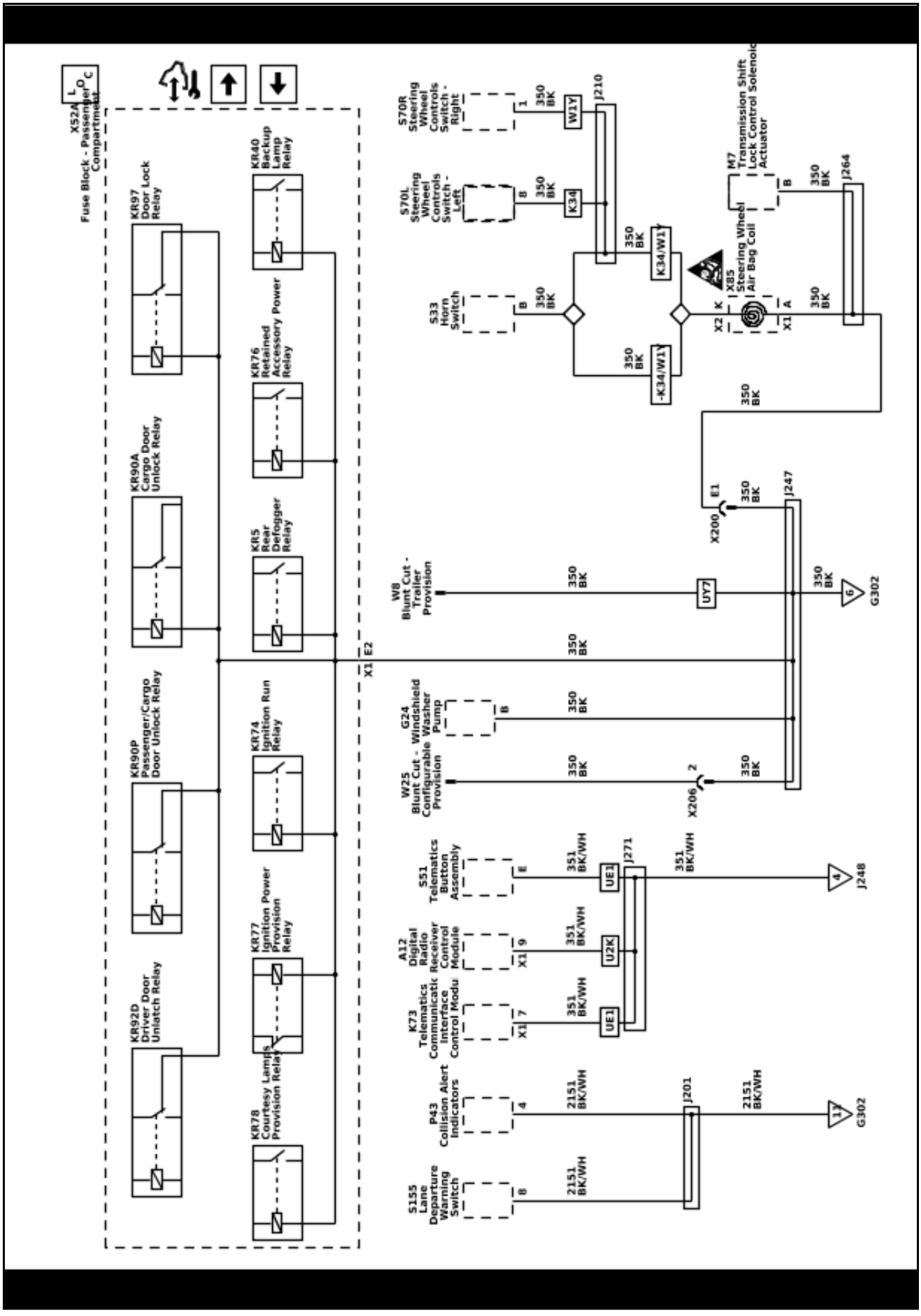
Ground Distribution Schematics (G103, G104, G105, G106, G107 and G108)



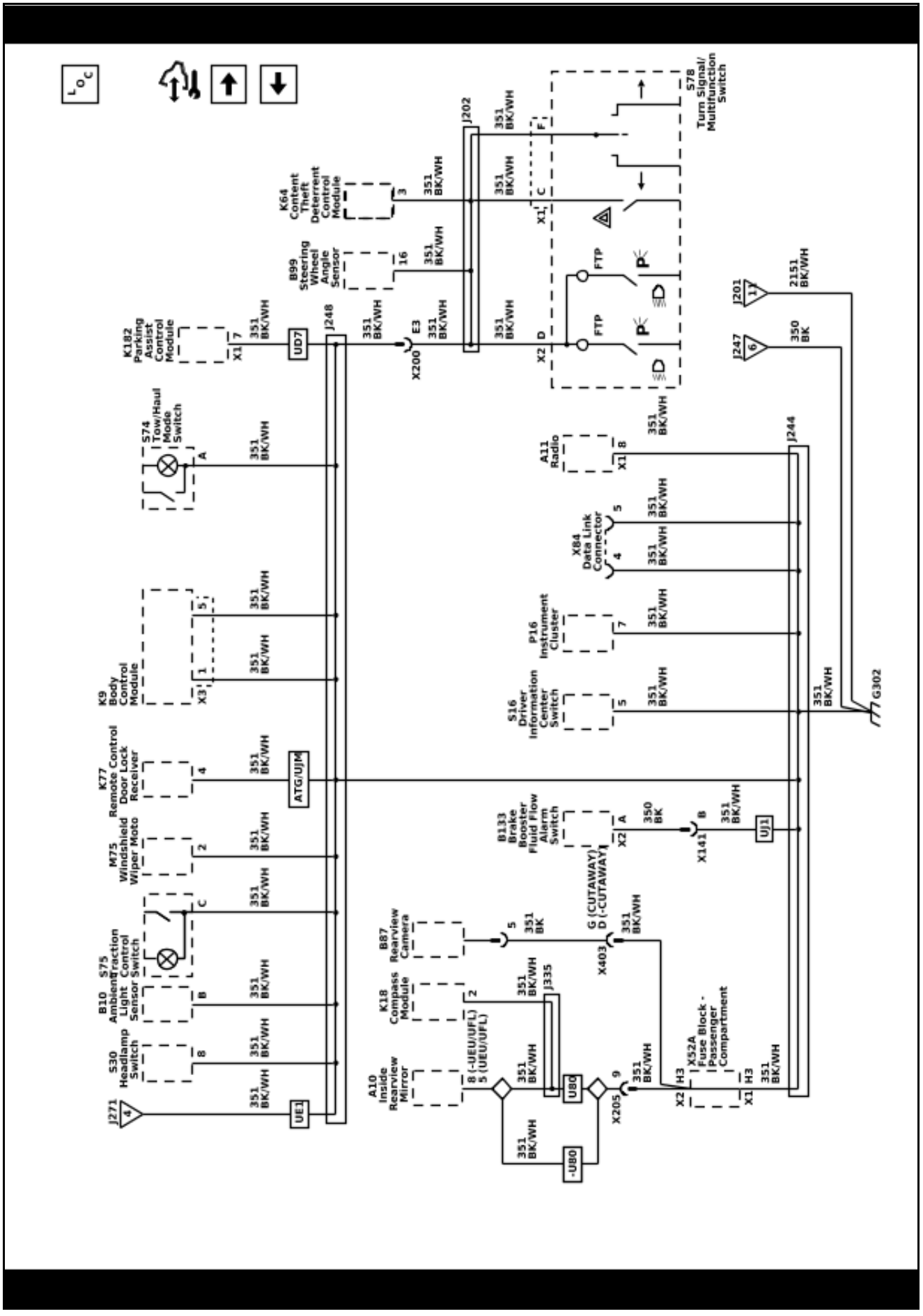
Ground Distribution Schematics (G300, G301, G304, and G305)



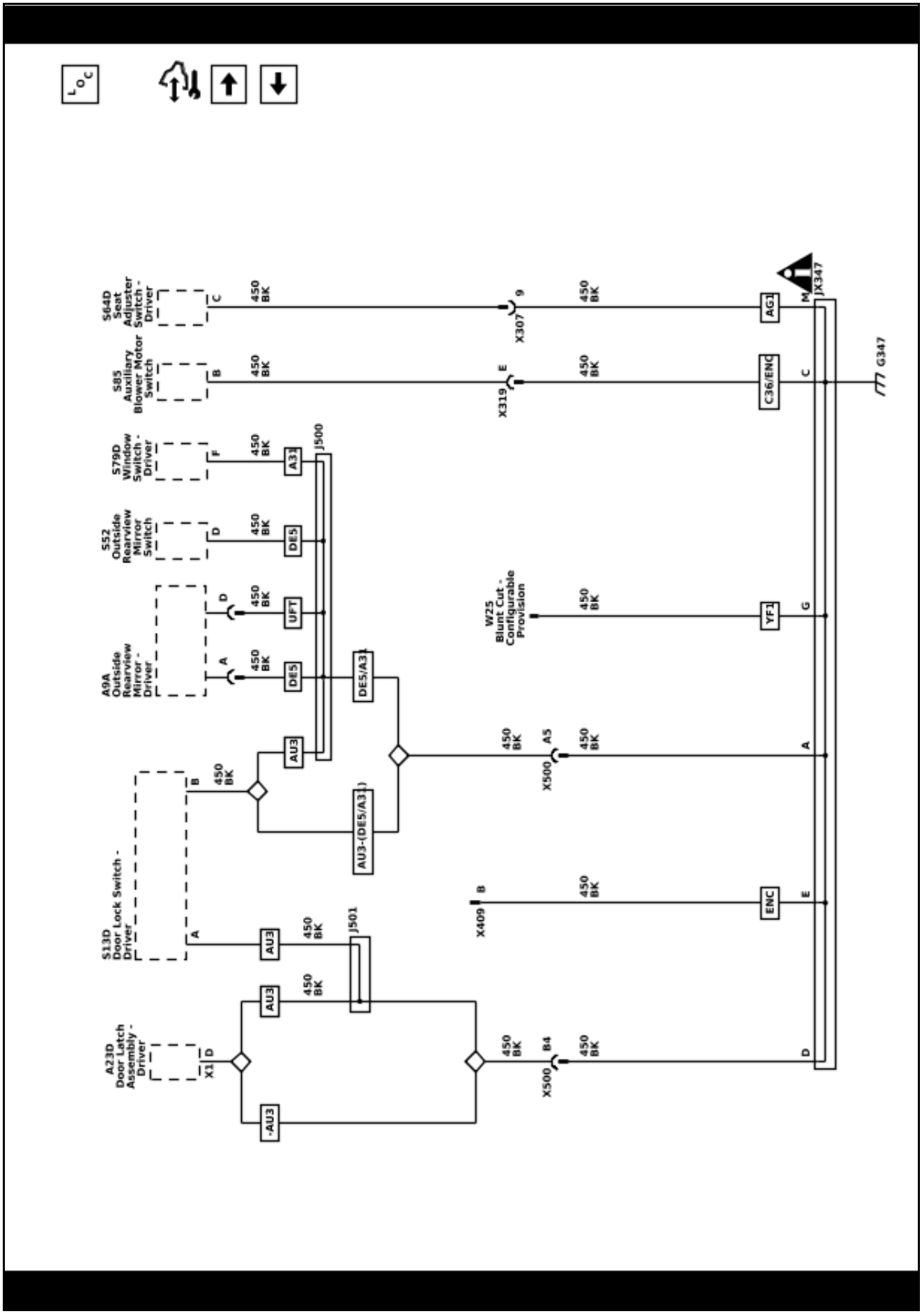
Ground Distribution Schematics (G302 (1 of 2))



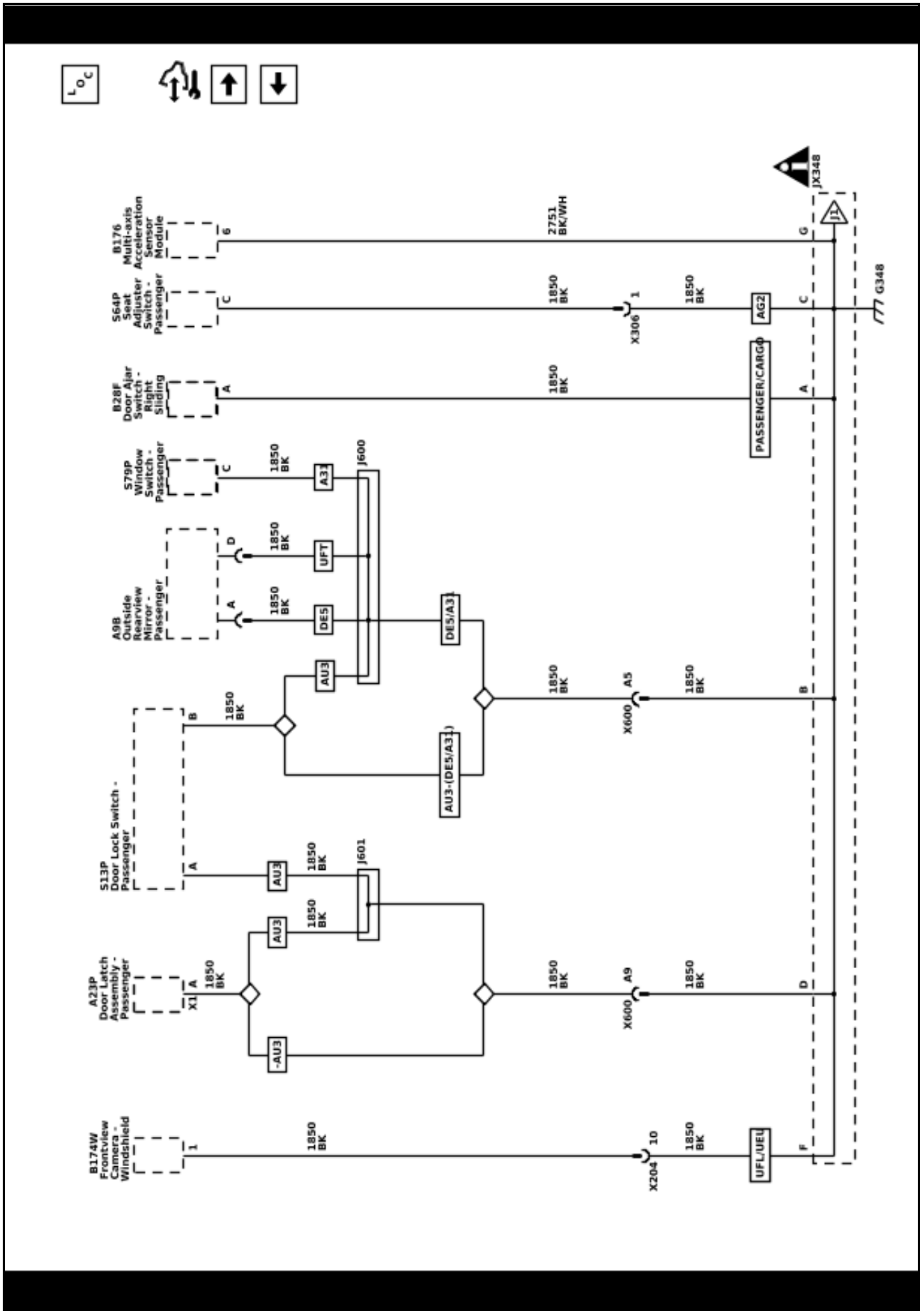
Ground Distribution Schematics (G302 (2 of 2))



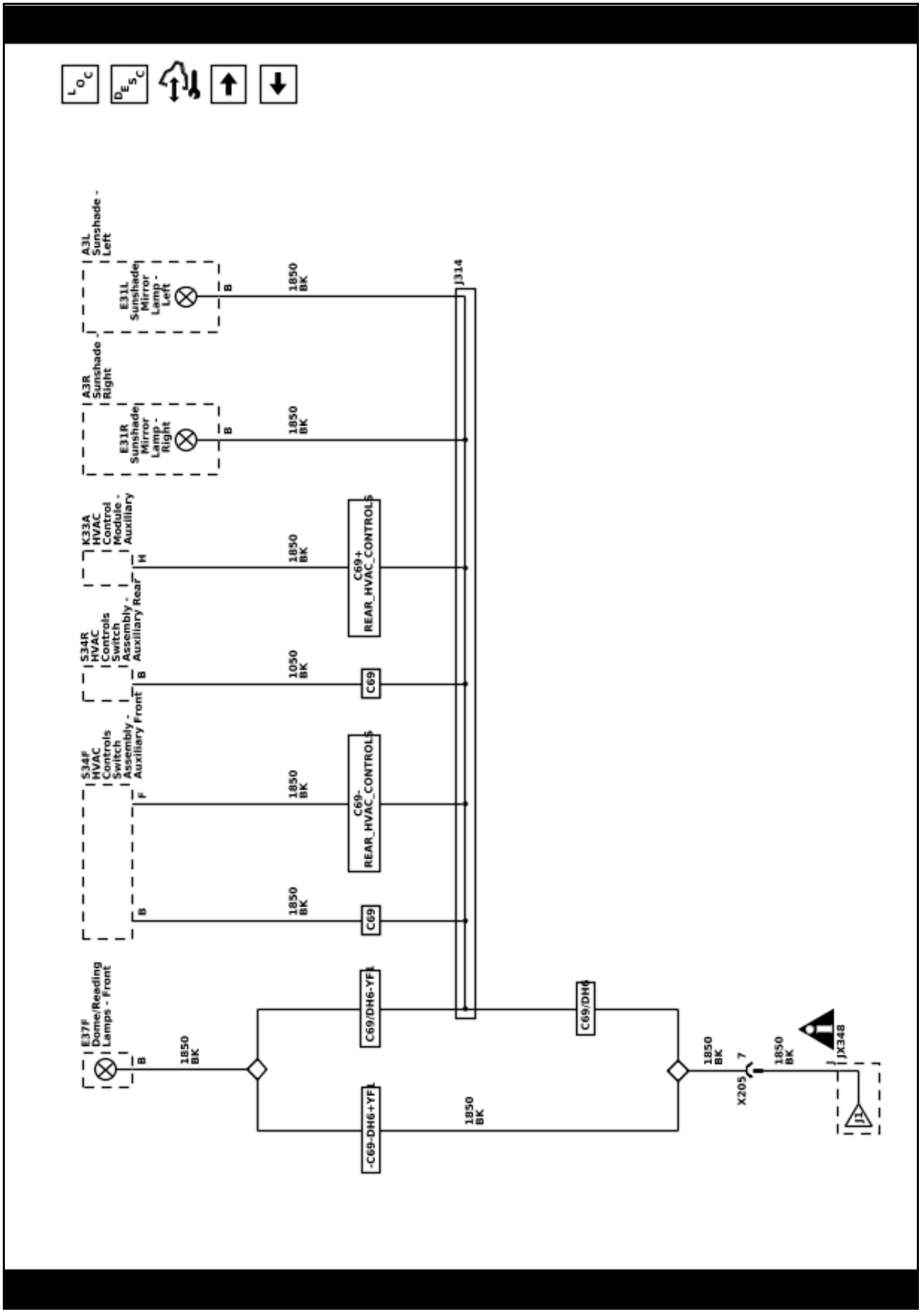
Ground Distribution Schematics (G347)



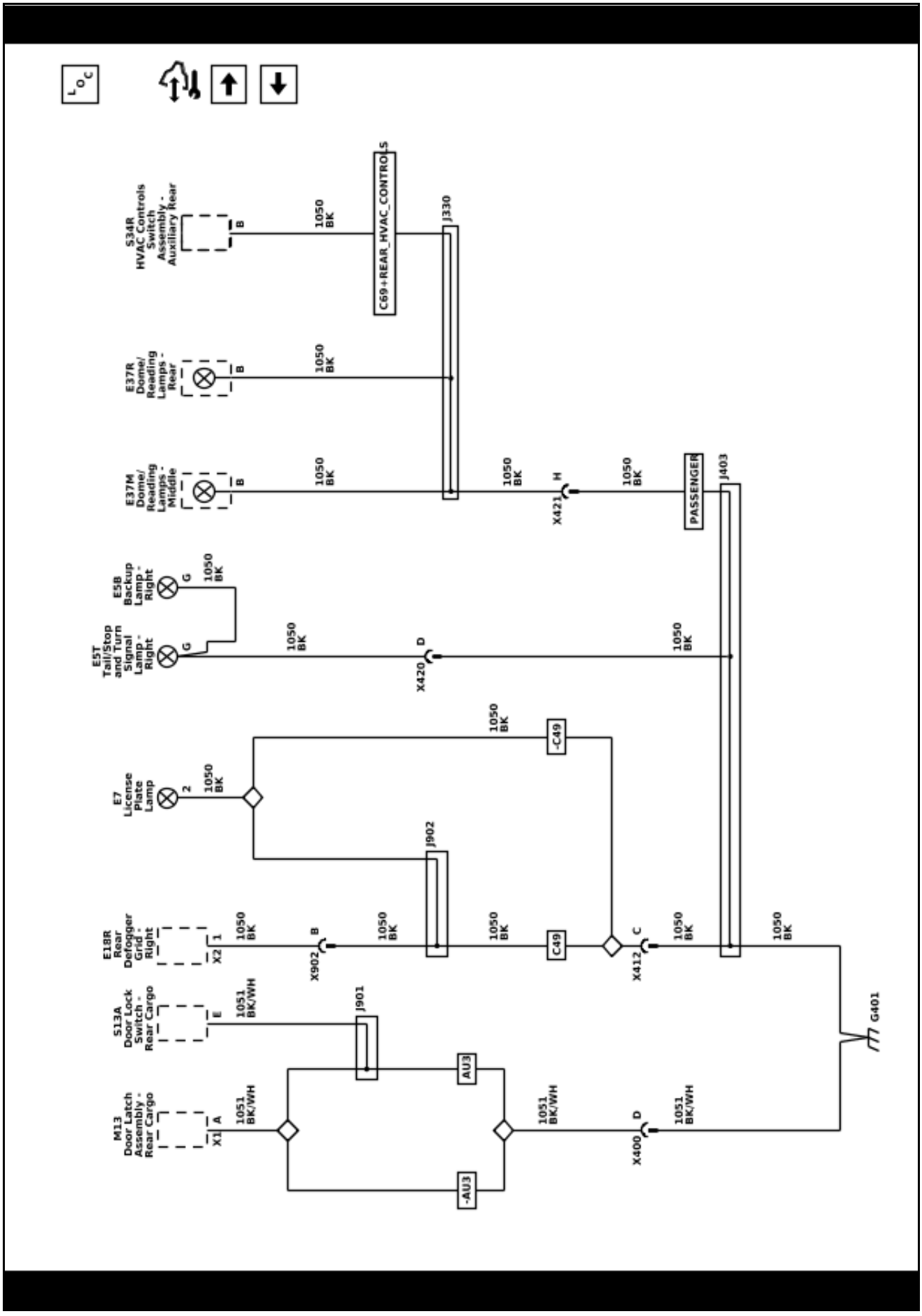
Ground Distribution Schematics (G348 (1 of 2))



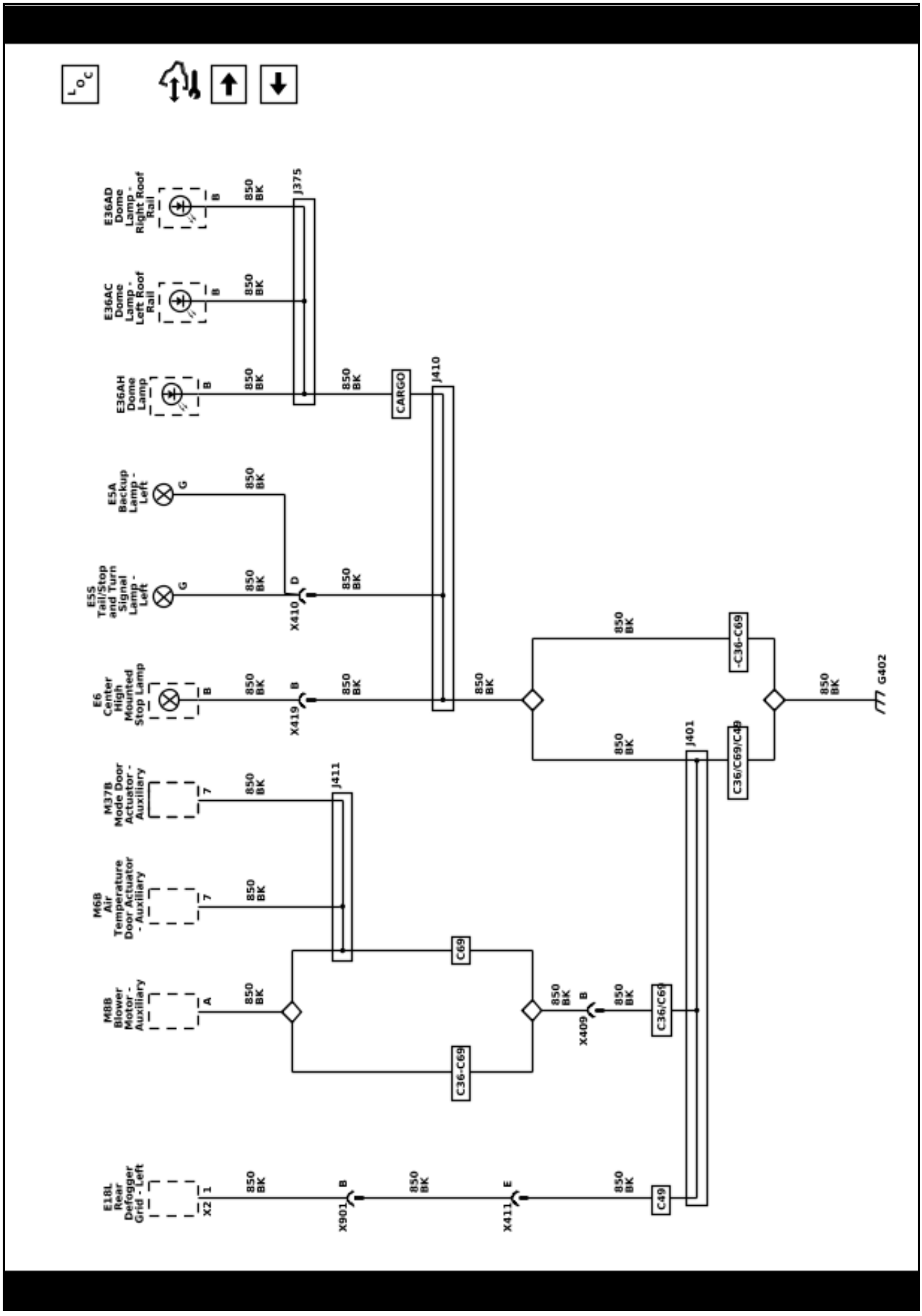
Ground Distribution Schematics (G348 (2 of 2))



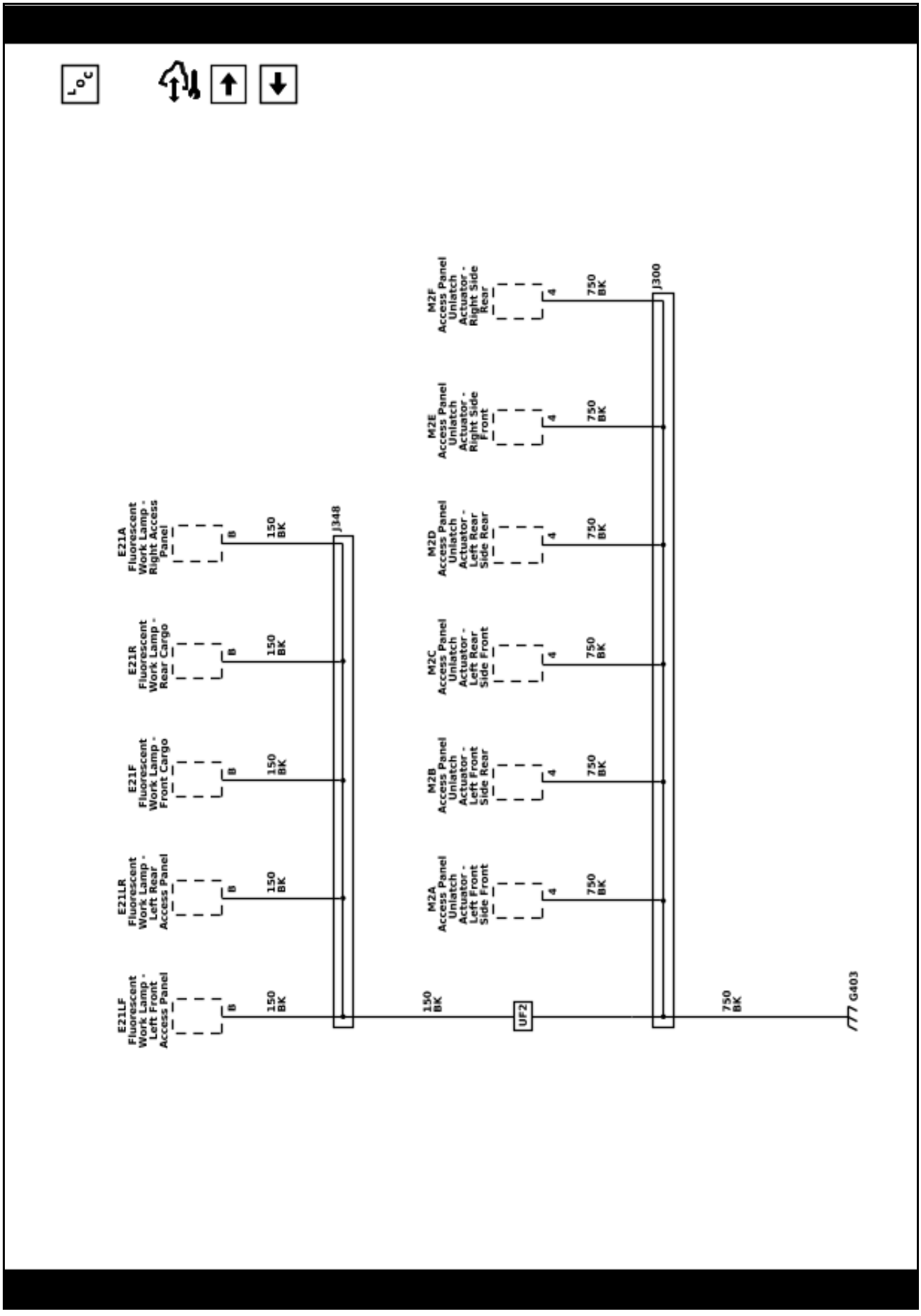
Ground Distribution Schematics (G401 (Passenger or Cargo))



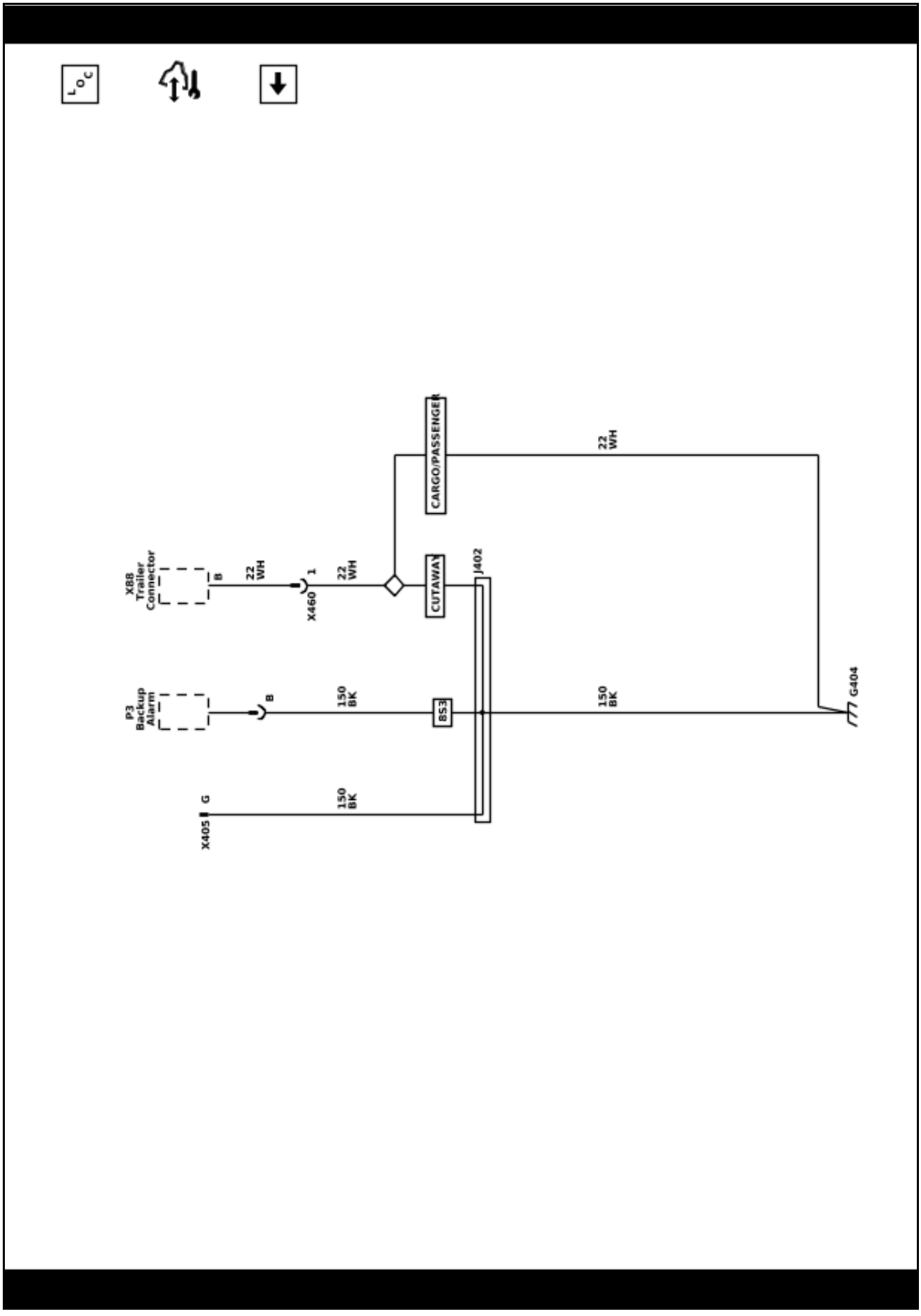
Ground Distribution Schematics (G402 (Passenger or Cargo))



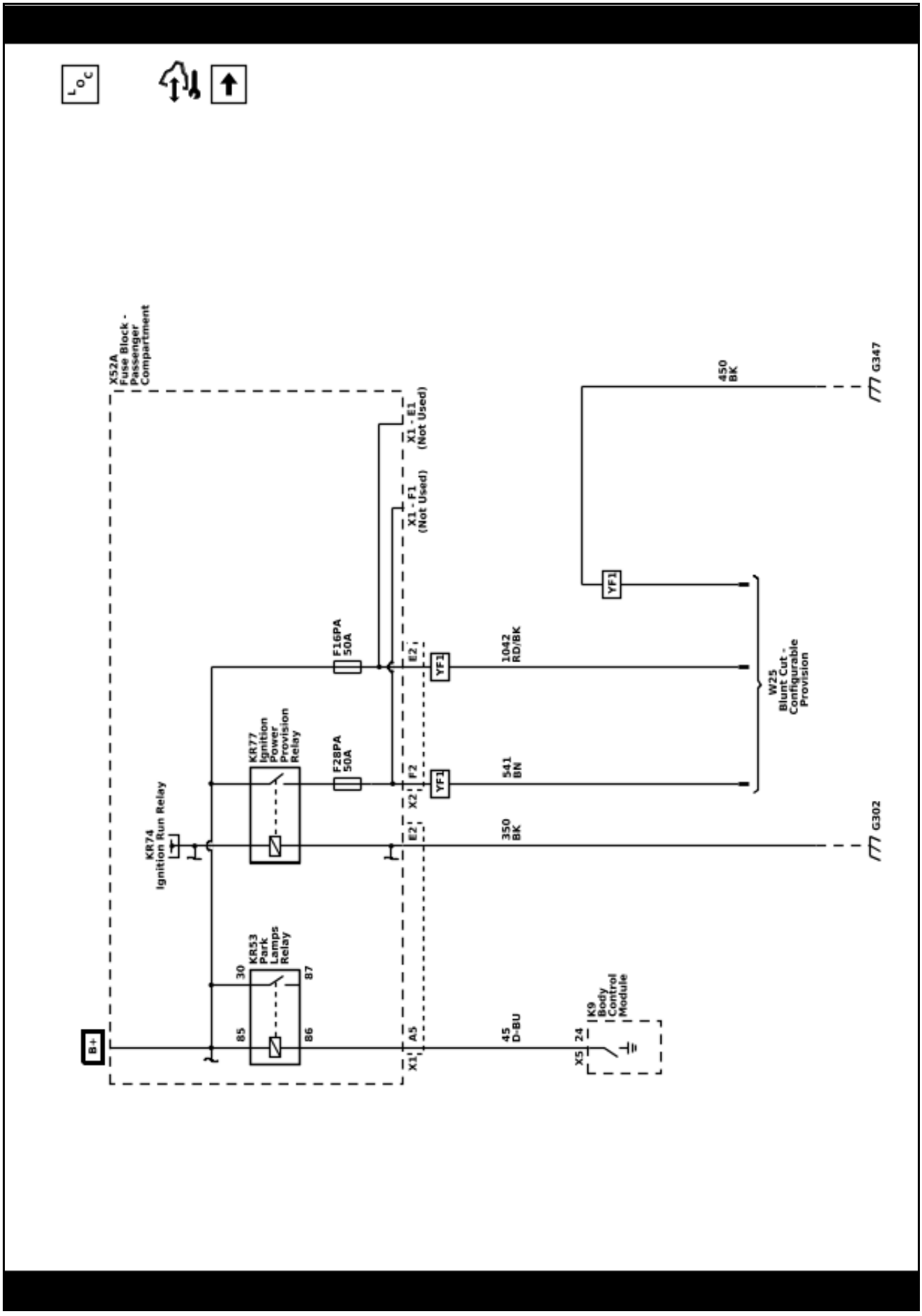
Ground Distribution Schematics (G403 (PRP))


6019698
E21LF Fluorescent Work Lamp - Left Front Access Panel
E21LR Fluorescent Work Lamp - Left Rear Access Panel
E21F Fluorescent Work Lamp - Front Cargo
E21R Fluorescent Work Lamp - Rear Cargo
E21A Fluorescent Work Lamp - Right Access Panel
M2A Access Panel Unlatch Actuator - Left Front Side Front
M2B Access Panel Unlatch Actuator - Left Front Side Rear
M2C Access Panel Unlatch Actuator - Left Rear Side Front
M2D Access Panel Unlatch Actuator - Left Rear Side Rear
M2E Access Panel Unlatch Actuator - Right Side Front
M2F Access Panel Unlatch Actuator - Right Side Rear
B
4
150 BK
750 BK
J348
J300
UF2
G403

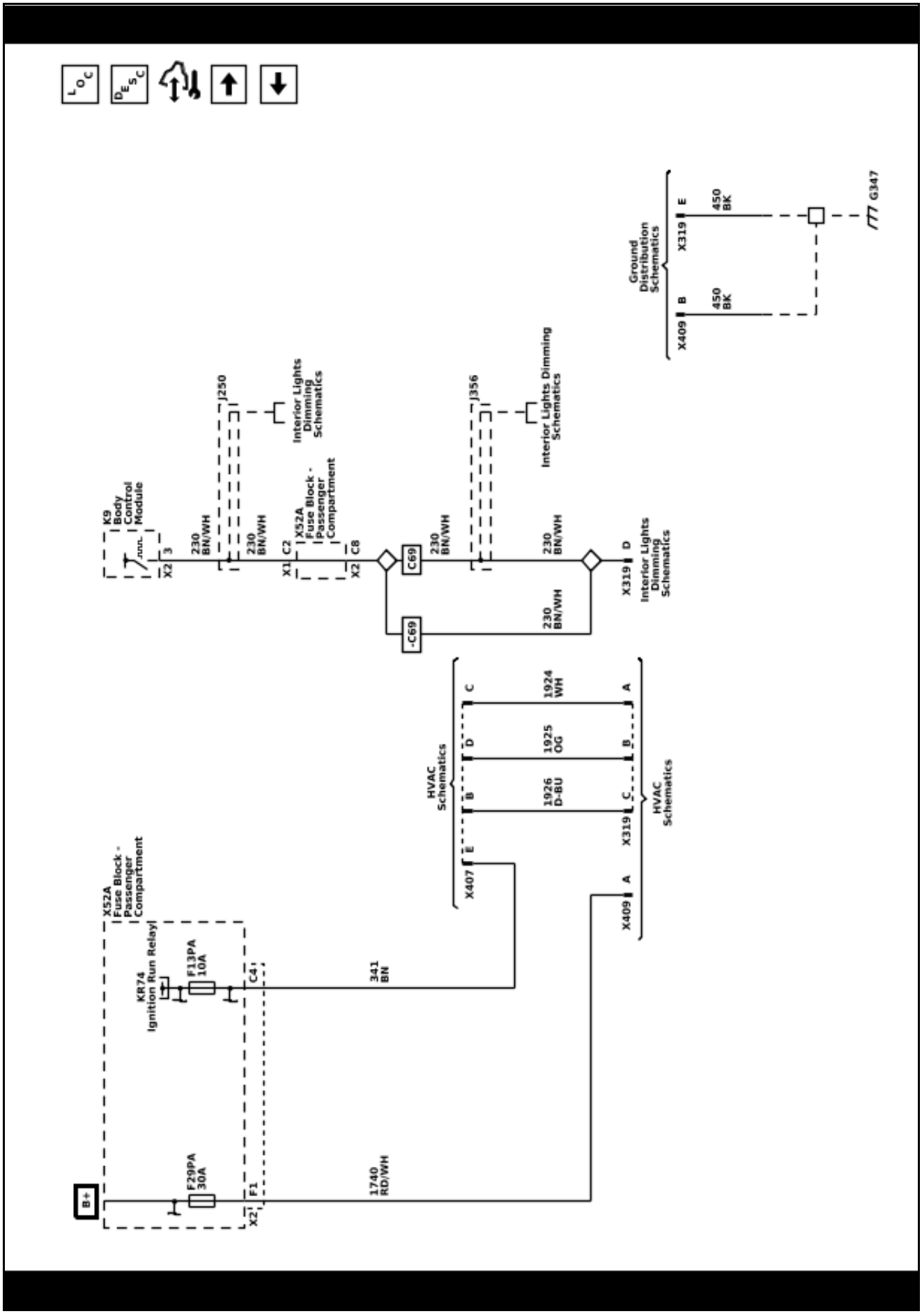
Ground Distribution Schematics (G404)



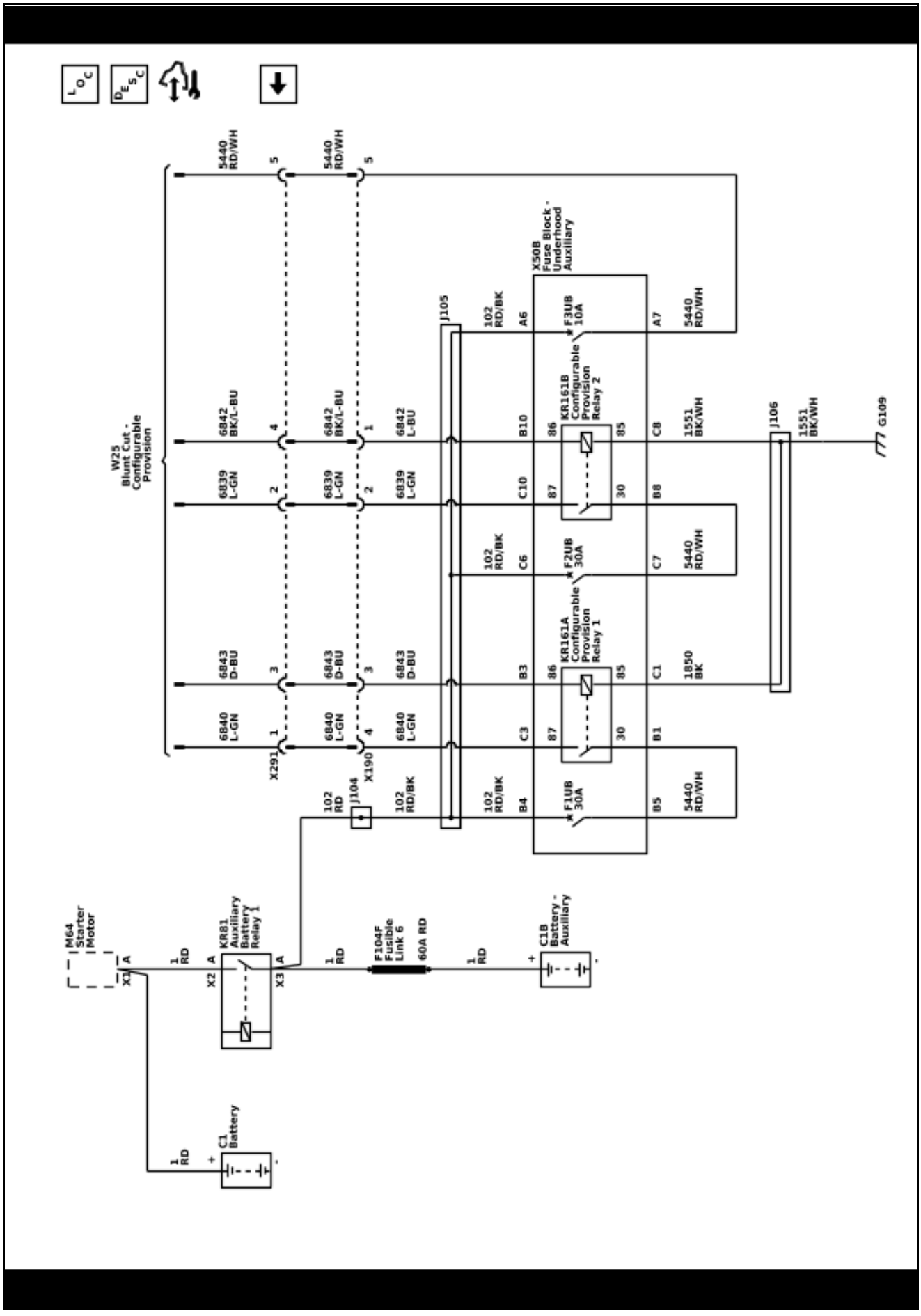
Upfitter Provision Schematics (Power, Ground, and Relay Controls)



Upfitter Provision Schematics (Rear Heat Auxiliary (ENC))



Upfitter Provision Schematics (Upfitter Fuse Block (9L7))



Component Locator

Master Electrical Component List

Code	Name	Option	Location	Locator View	Connector End View
A3L	Sunshade - Left	DH6	On the upper left of the headliner	Headliner Components - Front	A3L Sunshade - Left
A3R	Sunshade - Right	DH6	On the upper right of the headliner	Headliner Components - Front	A3R Sunshade - Right
A5	Driver Information Center	—	Integral to P16 Instrument Cluster	—	—
A7	Fuel Pump and Level Sensor Assembly	—	In the vehicle underbody, in the fuel tank	• Fuel Tank Components (NE7) • Fuel Tank Components (Without NE7)	A7 Fuel Pump and Level Sensor Assembly
A9A	Outside Rearview Mirror - Driver	—	Attached to the exterior of the left front door	Driver Door Components	A9A Outside Rearview Mirror - Driver
A9B	Outside Rearview Mirror - Passenger	—	Attached to the exterior of the right front door	Front Passenger Door Components	A9B Outside Rearview Mirror - Passenger
A10	Inside Rearview Mirror	—	In the passenger compartment, mounted at the top center of the windshield	Headliner Components - Front	• A10 Inside Rearview Mirror (-UEU/UFL) • A10 Inside Rearview Mirror (UEU/UFL)
A11	Radio	—	In the center of the instrument panel	Instrument Panel Components (1 of 2)	• A11 Radio X1 • A11 Radio X2 • A11 Radio X3 • A11 Radio X6
A12	Digital Radio Receiver Control Module	U2K	In the passenger compartment, mounted on a bracket under driver knee bolster panel	Instrument Panel Components (2 of 2)	A12 Digital Radio Receiver Control Module X1
A23D	Door Latch Assembly - Driver	—	Towards the rear of the driver door	Driver Door Components	• A23D Door Latch Assembly - Driver X1 • A23D Door Latch Assembly - Driver X2
A23P	Door Latch Assembly - Passenger	—	Towards the rear of the passenger door	Front Passenger Door Components	• A23P Door Latch Assembly - Passenger X1 • A23P Door Latch Assembly - Passenger X2
A91	Mirror Display	UVC	Internal to A10 Inside Rearview Mirror	—	—
B1	A/C Refrigerant Pressure Sensor	C60	On the engine harness in the left rear side of the engine compartment	Engine Compartment Components (2 of 2)	B1 A/C Refrigerant Pressure Sensor
B1B	A/C Low Side Pressure Switch	C60	Right rear side of the engine compartment, on the side of the accumulator	Engine Compartment Components (2 of 2)	B1B A/C Low Side Pressure Switch
B5LF	Wheel Speed Sensor - Left Front	—	At the left front wheel	Wheel Speed Sensors (Cargo/Passenger)	B5LF Wheel Speed Sensor - Left Front

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B5LR	Wheel Speed Sensor - Left Rear	—	At the left rear wheel, attached to the backing plate	• Wheel Speed Sensors (Cargo/ Passenger) • Wheel Speed Sensors (Cutaway with DRW) • Wheel Speed Sensors (Cutaway with SRW)	• B5LR Wheel Speed Sensor - Left Rear (-R04) • B5LR Wheel Speed Sensor - Left Rear (R04)
B5RF	Wheel Speed Sensor - Right Front	—	At the right front wheel	Wheel Speed Sensors (Cargo/Passenger)	B5RF Wheel Speed Sensor - Right Front
B5RR	Wheel Speed Sensor - Right Rear	—	At the right rear wheel, attached to the backing plate	• Wheel Speed Sensors (Cargo/ Passenger) • Wheel Speed Sensors (Cutaway with DRW) • Wheel Speed Sensors (Cutaway with SRW)	• B5RR Wheel Speed Sensor - Right Rear (-R04) • B5RR Wheel Speed Sensor - Right Rear (R04)
B9	Ambient Air Temperature Sensor	—	Attached to the front center of the radiator support	Front of Vehicle Components	• B9 Ambient Air Temperature Sensor (LV1/L8T) • B9 Ambient Air Temperature Sensor (UFA)
B10	Ambient Light Sensor	—	On the top of the instrument panel	Instrument Panel Components (1 of 2)	B10 Ambient Light Sensor
B12A	Transmission Fluid Pressure Switch	MYD	Internal to T12 Automatic Transmission Assembly	—	—
B13	Transmission Fluid Temperature Sensor	—	Internal to T12 Automatic Transmission Assembly	—	—
B14A	Transmission Output Shaft Speed Sensor	—	Internal to T12 Automatic Transmission Assembly	Automatic Transmission Internal Electrical Components	—
B14C	Transmission Input Shaft Speed Sensor	—	Internal to T12 Automatic Transmission Assembly	—	—
B14D	Transmission Intermediate Shaft Speed Sensor	M5U	Under the vehicle, internal to the Transmision Assembly	—	—
B15	Transmission Internal Mode Switch	MYD	Internal to T12 Automatic Transmission Assembly	—	—
B18	Battery Current Sensor	—	Attached to the negative terminal of the battery	Engine Compartment Components (1 of 2)	B18 Battery Current Sensor
B19A	Brake Booster Fluid Pressure Alarm Switch	UJ1	In the power steering inlet hose, near the power steering pump	Brake Booster Fluid Alarm Switches (UJ1)	B19A Brake Booster Fluid Pressure Alarm Switch
B20	Brake Fluid Level Switch	—	Left rear of the engine compartment, attached to the left lower side of the brake fluid reservoir	Engine Compartment Components (1 of 2)	B20 Brake Fluid Level Switch
B22	Brake Pedal Position Sensor	—	Attached to brake pedal assembly	Instrument Panel Components (1 of 2)	B22 Brake Pedal Position Sensor

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B23	Camshaft Position Sensor	—	Front of the engine between the water pump and the crank pulley	—	B23 Camshaft Position Sensor
B24	Mobile Telephone Microphone	UE1	In the passenger compartment, in the overhead console	Headliner Components - Front	B24 Mobile Telephone Microphone
B26	Crankshaft Position Sensor	—	Attached to the lower right rear side of the engine, behind the starter	• Left Side of the Engine Components (L8T) • Lower Left Rear of the Engine Components (LV1)	B26 Crankshaft Position Sensor
B28F	Door Ajar Switch - Right Sliding	Cargo/Passenger	Mounted towards the bottom of the right rear door	Passenger Compartment Components	B28F Door Ajar Switch - Right Sliding
B34	Engine Coolant Temperature Sensor	—	Attached to the engine coolant thermostat housing	• Front of the Engine Components (LV1) • Right Side of the Engine Components (L8T)	• B34 Engine Coolant Temperature Sensor (L8T) • B34 Engine Coolant Temperature Sensor (LV1)
B35	Engine Oil Level Switch	—	Attached to the left side of the oil pan	• Left Side of the Engine Components (L8T) • Left Side of the Engine Components (L8T) • Lower Left Rear of the Engine Components (LV1)	• B35 Engine Oil Level Switch (L8T) • B35 Engine Oil Level Switch (LV1)
B36	Engine Oil Temperature Sensor	L8T	In the engine compartmnet, near the left rear of the engine block	Right Side of the Engine Components (L8T)	B36 Engine Oil Temperature Sensor
B37B	Engine Oil Pressure Sensor	—	In engine compartment, on the rear lower left side of the engine	• Front of the Engine Components (LV1) • Top of Engine Components (L8T)	B37B Engine Oil Pressure Sensor
B46	Fuel Level Sensor	—	Under the vehicle, in the fuel tank	Inside of Fuel Tank Components	—
B47	Fuel Pressure Sensor	—	Under the vehicle, near the fuel tank	• Frame and Underbody Components (With NE7) • Frame and Underbody Components (Without NE7)	• B47 Fuel Pressure Sensor (-Cutaway Chassis) • B47 Fuel Pressure Sensor (Cutaway Chassis)
B47B	Fuel Rail Pressure Sensor	—	In the engine compartment, on top of the engine, mounted to the rear of the right fuel rail	• Top of Engine Components (L8T) • Top of the Engine Components (LV1)	B47B Fuel Rail Pressure Sensor
B52C	Heated Oxygen Sensor - Bank 1 Sensor 1	—	Attached to the left front exhaust pipe, front of the catalytic converter	• Rear of the Engine Components (LV1) • Right Side of the Engine Components (L8T)	B52C Heated Oxygen Sensor - Bank 1 Sensor 1

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B52D	Heated Oxygen Sensor - Bank 1 Sensor 2	—	Attached to the left front exhaust pipe, back of the catalytic converter	• Rear of the Engine Components (LV1) • Right Side of the Engine Components (L8T)	B52D Heated Oxygen Sensor - Bank 1 Sensor 2
B52E	Heated Oxygen Sensor - Bank 2 Sensor 1	—	Attached to the right front exhaust pipe, front of the catalytic converter	• Left Side of the Engine Components (L8T) • Rear of the Engine Components (LV1)	B52E Heated Oxygen Sensor - Bank 2 Sensor 1
B52F	Heated Oxygen Sensor - Bank 2 Sensor 2	—	Attached to the right front exhaust pipe, rear of the catalytic converter	• Left Side of the Engine Components (L8T) • Rear of the Engine Components (LV1)	B52F Heated Oxygen Sensor - Bank 2 Sensor 2
B55	Engine Hood Switch	BTV	In the center front of the engine compartment, attached to the hood latch assembly	Front of Vehicle Components	B55 Engine Hood Switch
B59	Front Impact Sensor	—	On the lower center of the radiator support	• Airbag Impact Sensor Components (E24) • Airbag Impact Sensor Components (YA2)	B59 Front Impact Sensor
B63LF	Side Impact Sensor - Left Front	ASF	In the left front side door	• Airbag Impact Sensor Components (E24) • Airbag Impact Sensor Components (YA2)	B63LF Side Impact Sensor - Left Front
B63LR	Side Impact Sensor - Left Rear	ASF	In the left center of the vehicle behind the body panel trim	• Airbag Impact Sensor Components (E24) • Airbag Impact Sensor Components (YA2)	B63LR Side Impact Sensor - Left Rear
B63RF	Side Impact Sensor - Right Front	ASF	In the right front side door	—	B63RF Side Impact Sensor - Right Front
B63RR	Side Impact Sensor - Right Rear	ASF	In the lower right side of the vehicle near the rear side door	• Airbag Impact Sensor Components (E24) • Airbag Impact Sensor Components (YA2)	• B63RR Side Impact Sensor - Right Rear (E24) • B63RR Side Impact Sensor - Right Rear (YA2)
B68A	Knock Sensor 1	—	Mounted to the lower right side of the engine in-between the engine oil pan and the right bank exhaust manifold	• Lower Right Rear of the Engine Components (LV1) • Right Side of the Engine Components (L8T)	B68A Knock Sensor 1
B68B	Knock Sensor 2	—	Mounted to the lower left of the engine, in-between the engine oil filter and the left bank exhaust manifold	• Left Side of the Engine Components (L8T) • Lower Left Rear of the Engine Components (LV1)	B68B Knock Sensor 2

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B74	Manifold Absolute Pressure Sensor	—	In the engine compartment, attached to the intake manifold, on top of the engine	• Front of the Engine Components (LV1) • Right Side of the Engine Components (L8T)	B74 Manifold Absolute Pressure Sensor
B75C	Multifunction Intake Air Sensor	—	Right front of the engine compartment, mounted in the air cleaner duct	Engine Compartment Components (2 of 2)	B75C Multifunction Intake Air Sensor
B80	Park Brake Switch	—	Left lower side of the instrument panel on the brake pedal assembly	—	B80 Park Brake Switch
B87	Rearview Camera	UVC	On the right rear cargo door, in license plate trim	Rear of Vehicle Components (Passenger or Cargo)	• B87 Rearview Camera (-Cutaway) • B87 Rearview Camera (Cutaway)
B88D	Seat Belt Switch - Driver	—	Right side of the driver seat, inside Seat Belt Buckle — Driver	—	—
B88P	Seat Belt Switch - Passenger	AK5	Left side of the front passenger seat, inside Seat Belt Buckle — Passenger	—	—
B99	Steering Wheel Angle Sensor	—	Attached the lower steering column jacket assembly	Steering Column Components (2 of 2)	B99 Steering Wheel Angle Sensor
B107	Accelerator Pedal Position Sensor	—	Left lower side of the instrument panel, above the accelerator pedal	Instrument Panel Components (1 of 2)	B107 Accelerator Pedal Position Sensor
B133	Brake Booster Fluid Flow Alarm Switch	UJ1	In the power steering outlet hose, near the power steering pump	Brake Booster Fluid Alarm Switches (UJ1)	• B133 Brake Booster Fluid Flow Alarm Switch X1 • B133 Brake Booster Fluid Flow Alarm Switch X2
B150	Fuel Tank Pressure Sensor	—	Attached to the top of the fuel sender assembly	• Frame and Underbody Components (With NE7) • Frame and Underbody Components (Without NE7) • Fuel Tank Components (NE7) • Fuel Tank Components (Without NE7)	B150 Fuel Tank Pressure Sensor
B153D	Seat Belt Buckle - Driver	—	Right side of the driver seat	Driver Seat Components	B153D Seat Belt Buckle - Driver
B153P	Seat Belt Buckle - Passenger	AK5	Left side of the front passenger seat	Passenger Seat Components	B153P Seat Belt Buckle - Passenger
B174W	Frontview Camera - Windshield	UFL	In the passenger compartment, mounted at the top center of the windshield	Headliner Components - Front	B174W Frontview Camera - Windshield
B176	Multi-axis Acceleration Sensor Module	—	In the passenger compartment, on the front center on the floor board between the front seats	Passenger Compartment Components	B176 Multi-axis Acceleration Sensor Module
B218L	Side Object Sensor Module - Left	UFT	At the rear of the vehicle, in the rear bumper, at the left corner	Rear of Vehicle Components (Passenger or Cargo)	B218L Side Object Sensor Module - Left (UFT)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
B218R	Side Object Sensor Module - Right	UFT	At the rear of the vehicle, in the rear bumper, at the right corner	Rear of Vehicle Components (Passenger or Cargo)	B218R Side Object Sensor Module - Right (UFT)
B303	Transmission Range Sensor	M5U	Under the vehicle, center, within T12 Automatic Transmission Assembly	—	B303 Transmission Range Sensor (M5U)
B306E	Parking Assist Sensor - Rear Left Outer	UD7	At the rear of the vehicle, housed in the rear fascia	Rear of Vehicle Components (Passenger or Cargo)	B306E Parking Assist Sensor - Rear Left Outer (UD7)
B306F	Parking Assist Sensor - Rear Left Middle	UD7	At the rear of the vehicle, housed in the rear fascia	Rear of Vehicle Components (Passenger or Cargo)	B306F Parking Assist Sensor - Rear Left Middle (UD7)
B306G	Parking Assist Sensor - Rear Right Middle	UD7	At the rear of the vehicle, housed in the rear fascia	Rear of Vehicle Components (Passenger or Cargo)	B306G Parking Assist Sensor - Rear Right Middle (UD7)
B306H	Parking Assist Sensor - Rear Right Outer	UD7	At the rear of the vehicle, housed in the rear fascia	Rear of Vehicle Components (Passenger or Cargo)	B306H Parking Assist Sensor - Rear Right Outer (UD7)
C1	Battery	—	At the right front side of the engine compartment	Engine Compartment Components	• C1 Battery ((-)) • C1 Battery ((+))
C1B	Battery - Auxiliary	TP3	Left frame rail, center of the vehicle	Auxiliary Battery (TP3)	C1B Battery - Auxiliary
E2LF	Side Marker Lamp - Left Front	—	In the left front corner of the vehicle	Front of Vehicle Components	E2LF Side Marker Lamp - Left Front
E2RF	Side Marker Lamp - Right Front	—	In the right front corner of the vehicle	Front of Vehicle Components	E2RF Side Marker Lamp - Right Front
E4E	Headlamp - Left High Beam	—	At the left front of the vehicle	Front of Vehicle Components	E4E Headlamp - Left High Beam
E4F	Headlamp - Right High Beam	—	At the right front of the vehicle	Front of Vehicle Components	E4F Headlamp - Right High Beam
E4G	Headlamp - Left Low Beam	—	At the left front of the vehicle	Front of Vehicle Components	E4G Headlamp - Left Low Beam
E4H	Headlamp - Right Low Beam	—	At the right front of the vehicle	Front of Vehicle Components	E4H Headlamp - Right Low Beam
E4N	Park/Turn Signal Lamp - Left	—	In the left front corner of the vehicle	Front of Vehicle Components	E4N Park/Turn Signal Lamp - Left
E4P	Park/Turn Signal Lamp - Right	—	In the right front corner of the vehicle	Front of Vehicle Components	E4P Park/Turn Signal Lamp - Right
E5A	Backup Lamp - Left	—	Attached to the left tail lamp assembly	Rear of Vehicle Components (Passenger or Cargo)	E5A Backup Lamp - Left
E5B	Backup Lamp - Right	—	Attached to the right tail lamp assembly	Rear of Vehicle Components (Passenger or Cargo)	E5B Backup Lamp - Right
E5S	Tail/Stop and Turn Signal Lamp - Left	Passenger/Cargo	Attached to the left tail lamp assembly, upper bulb	Rear of Vehicle Components (Passenger or Cargo)	E5S Tail/Stop and Turn Signal Lamp - Left
E5T	Tail/Stop and Turn Signal Lamp - Right	Passenger/Cargo	Attached to the right tail lamp assembly, upper bulb	Rear of Vehicle Components (Passenger or Cargo)	E5T Tail/Stop and Turn Signal Lamp - Right
E6	Center High Mounted Stop Lamp	Passenger/Cargo	At the top rear center of the vehicle	Rear of Vehicle Components (Passenger or Cargo)	E6 Center High Mounted Stop Lamp
E7	License Plate Lamp	Passenger/Cargo	Attached to the outer right cargo door, above the license plate mount	Rear of Vehicle Components (Passenger or Cargo)	E7 License Plate Lamp

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
E18L	Rear Defogger Grid - Left	C49	Attached to the left cargo door window	Rear Door Components (Passenger or Cargo)	• E18L Rear Defogger Grid - Left X1 • E18L Rear Defogger Grid - Left X2
E18R	Rear Defogger Grid - Right	C49	Attached to the right cargo door window	Rear Door Components (Passenger or Cargo)	• E18R Rear Defogger Grid - Right X1 • E18R Rear Defogger Grid - Right X2
E21A	Fluorescent Work Lamp - Right Access Panel	PRP	Mounted towards the right of the top access panel	—	E21A Fluorescent Work Lamp - Right Access Panel
E21F	Fluorescent Work Lamp - Front Cargo	PRP	Mounted towards the top front of the cargo area	—	E21F Fluorescent Work Lamp - Front Cargo
E21LF	Fluorescent Work Lamp - Left Front Access Panel	PRP	At the front and towards the top of the left access panel	—	E21LF Fluorescent Work Lamp - Left Front Access Panel
E21LR	Fluorescent Work Lamp - Left Rear Access Panel	PRP	Mounted towards the top of the right access panel	—	E21LR Fluorescent Work Lamp - Left Rear Access Panel
E21R	Fluorescent Work Lamp - Rear Cargo	PRP	Mounted towards the top rear of the cargo area	—	E21R Fluorescent Work Lamp - Rear Cargo
E22	Underhood Lamp	—	In the engine compartment, attached to the left inner hood panel	Underside of Hood Components	E22 Underhood Lamp
E31L	Sunshade Mirror Lamp - Left	DH6	On the upper left of the headliner, inside the Sunshade — Left	Headliner Components - Front	—
E31R	Sunshade Mirror Lamp - Right	DH6	On the upper right of the headliner, in the Sunshade — Right	Headliner Components - Front	—
E36AC	Dome Lamp - Left Roof Rail	Cargo Without YF7	In the rear of the roof panel	—	E36AC Dome Lamp - Left Roof Rail
E36AD	Dome Lamp - Right Roof Rail	Cargo Without YF7	In the rear of the roof panel	—	E36AD Dome Lamp - Right Roof Rail
E36AH	Dome Lamp	Cargo Without YF7	In the rear of the roof panel	—	E36AH Dome Lamp
E37F	Dome/Reading Lamps - Front	Without YF7	In the front of the roof panel	Headliner Components - Front	E37F Dome/Reading Lamps - Front
E37M	Dome/Reading Lamps - Middle	Passenger	In the center of the roof panel	Headliner Components - Rear	E37M Dome/Reading Lamps - Middle
E37R	Dome/Reading Lamps - Rear	Passenger	In the rear of the roof panel	Headliner Components - Rear	E37R Dome/Reading Lamps - Rear
F101	Passenger Instrument Panel Air Bag	—	Right side of the instrument panel	Instrument Panel Components (2 of 2)	F101 Passenger Instrument Panel Air Bag
F105LF	Roof Rail Air Bag - Left Front	ASF	Behind the left side of the headliner trim	Passenger Compartment Components	F105LF Roof Rail Air Bag - Left Front
F105RF	Roof Rail Air Bag - Right Front	ASF	Behind the right side of the headliner trim	Passenger Compartment Components	F105RF Roof Rail Air Bag - Right Front
F105RR	Roof Rail Air Bag - Right Rear	ASF	Behind the right rear side of the headliner trim	Passenger Compartment Components	F105RR Roof Rail Air Bag - Right Rear
F106D	Seat Side Air Bag - Driver	AK5	Within the driver seat back, towards the outside	—	F106D Seat Side Air Bag - Driver

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
F106P	Seat Side Air Bag - Passenger	AK5	Within the passenger seat back, towards the outside	—	F106P Seat Side Air Bag - Passenger
F107	Steering Wheel Air Bag	—	Attached to the center of the steering wheel	Steering Column Components (1 of 2)	F107 Steering Wheel Air Bag
F109D	Seat Belt Buckle Pretensioner - Driver	—	Part of the seat belt buckle	Driver Seat Components	F109D Seat Belt Buckle Pretensioner - Driver
F109P	Seat Belt Buckle Pretensioner - Passenger	AK5	Part of the seat belt buckle	Passenger Seat Components	F109P Seat Belt Buckle Pretensioner - Passenger
G12	Fuel Pump	—	Under the vehicle, internally attached to the middle of the fuel pump assembly	—	—
G13	Generator	—	Attached to the right front of the engine	• Front of the Engine Components (LV1) • Left Side of the Engine Components (L8T)	• G13 Generator X1 • G13 Generator X2 (L8T+KG4+TP3) • G13 Generator X2 (L8T+KG4-TP3) • G13 Generator X2 (L8T+KW5+TP3) • G13 Generator X2 (L8T+KW5-TP3) • G13 Generator X2 (LV1+K68) • G13 Generator X2 (LV1+KW5)
G18	High Pressure Fuel Pump	—	In the engine compartment, at the top rear of the engine, between the cylinder heads	• Top of Engine Components (L8T) • Top of the Engine Components (LV1)	G18 High Pressure Fuel Pump
G24	Windshield Washer Pump	—	Attached to the windshield washer fluid reservoir in the right front of the engine compartment	—	G24 Windshield Washer Pump
K9	Body Control Module	—	Lower right side of the instrument panel behind the knee bolster	Instrument Panel Components (2 of 2)	• K9 Body Control Module X1 • K9 Body Control Module X2 • K9 Body Control Module X3 • K9 Body Control Module X4 • K9 Body Control Module X5 • K9 Body Control Module X6 • K9 Body Control Module X7
K17	Electronic Brake Control Module	—	Attached to the left frame rail, near the center of the vehicle	• Frame and Underbody Components (With NE7) • Frame and Underbody Components (Without NE7)	K17 Electronic Brake Control Module
K18	Compass Module	U80	In the front of the headliner	Headliner Components - Front	K18 Compass Module

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
K20	Engine Control Module	—	At the left front side of the engine compartment, near the underhood fuse block on the inner left front fender	Engine Compartment Components (1 of 2)	• K20 Engine Control Module X1 (L8T) • K20 Engine Control Module X2 (L8T) • K20 Engine Control Module X3 (L8T) • K20 Engine Control Module X1 (LV1) • K20 Engine Control Module X2 (LV1) • K20 Engine Control Module X3 (LV1)
K33A	HVAC Control Module - Auxiliary	—	In the front of the headliner	Headliner Components - Front	K33A HVAC Control Module - Auxiliary
K36	Inflatable Restraint Sensing and Diagnostic Module	—	Below the driver seat under the carpet on the floor board	Passenger Compartment Components	• K36 Inflatable Restraint Sensing and Diagnostic Module X1 • K36 Inflatable Restraint Sensing and Diagnostic Module X2
K64	Content Theft Deterrent Control Module	—	In the steering column around the ignition key cylinder housing	Steering Column Components (1 of 2)	K64 Content Theft Deterrent Control Module
K71	Transmission Control Module	M5U	Internal to T12 Automatic Transmission Assembly	Engine Compartment Components (1 of 2)	• K71 Transmission Control Module (M5U) • K71 Transmission Control Module X3 (MYD)
K73	Telematics Communication Interface Control Module	UE1	In the passenger compartment, mounted on a bracket under driver knee bolster panel	Instrument Panel Components (2 of 2)	• K73 Telematics Communication Interface Control Module X1 • K73 Telematics Communication Interface Control Module X2
K77	Remote Control Door Lock Receiver	ATG/UJM	Attached to the upper left side of the instrument panel carrier, above the instrument panel cluster (IPC)	Instrument Panel Components (2 of 2)	K77 Remote Control Door Lock Receiver
K111	Fuel Pump Driver Control Module	—	Under the vehicle, attached to the left frame rail, apprximately midpoint of vehicle	• Frame and Underbody Components (With NE7) • Frame and Underbody Components (Without NE7)	K111 Fuel Pump Driver Control Module
K182	Parking Assist Control Module	UD7	In the passenger compartment, mounted within the instrument panel on the right side if the steering column	Instrument Panel Components (2 of 2)	• K182 Parking Assist Control Module X1 • K182 Parking Assist Control Module X2

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M2A	Access Panel Unlatch Actuator - Left Front Side Front	PRP	Inside the left access panel area	—	M2A Access Panel Unlatch Actuator - Left Front Side Front
M2B	Access Panel Unlatch Actuator - Left Front Side Rear	PRP	Inside the left access panel area	—	M2B Access Panel Unlatch Actuator - Left Front Side Rear
M2C	Access Panel Unlatch Actuator - Left Rear Side Front	PRP	Inside the left access panel area	—	M2C Access Panel Unlatch Actuator - Left Rear Side Front
M2D	Access Panel Unlatch Actuator - Left Rear Side Rear	PRP	Inside the left access panel area	—	M2D Access Panel Unlatch Actuator - Left Rear Side Rear
M2E	Access Panel Unlatch Actuator - Right Side Front	PRP	Inside the right access panel area	—	M2E Access Panel Unlatch Actuator - Right Side Front
M2F	Access Panel Unlatch Actuator - Right Side Rear	PRP	Inside the right access panel area	—	M2F Access Panel Unlatch Actuator - Right Side Rear
M6	Air Temperature Door Actuator	—	Lower right side of the instrument panel, attached to the HVAC module	HVAC Case Components	M6 Air Temperature Door Actuator
M6B	Air Temperature Door Actuator - Auxiliary	C69	In the left rear of the passenger compartment, attached to the auxiliary HVAC module	• Auxiliary HVAC Components (C36/C69) • Auxiliary HVAC Components (C36/C69)	M6B Air Temperature Door Actuator - Auxiliary
M7	Transmission Shift Lock Control Solenoid Actuator	—	Attached to the right side of the steering column	Steering Column Components (1 of 2)	M7 Transmission Shift Lock Control Solenoid Actuator
M8	Blower Motor	—	Right rear of the engine compartment, attached to the evaporator case	—	M8 Blower Motor
M8B	Blower Motor - Auxiliary	C36/C69	In the left rear of the passenger compartment, attached to the auxiliary HVAC module	—	M8B Blower Motor - Auxiliary
M13	Door Latch Assembly - Rear Cargo	Passenger/Cargo	Attached to the right cargo door latch, in the right cargo door	Rear Door Components (Passenger or Cargo)	• M13 Door Latch Assembly - Rear Cargo X1 • M13 Door Latch Assembly - Rear Cargo X2
M14RR	Door Lock Actuator - Right Rear	AU3	Attached to the right rear door latch, in the right rear door	• Right Side Hinged Door Components (E24) • Right Side Sliding Door Components (YA2)	• M14RR Door Lock Actuator - Right Rear (E24) • M14RR Door Lock Actuator - Right Rear (YA2)
M37B	Mode Door Actuator - Auxiliary	C69	In the left rear of the passenger compartment, attached to the auxiliary HVAC module	Auxiliary HVAC Components (C36/C69)	M37B Mode Door Actuator - Auxiliary
M49D	Seat Motor Assembly - Driver	AG1	Below the left front seat, attached to the seat frame	Driver Seat Components	M49D Seat Motor Assembly - Driver (AG1)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
M49P	Seat Motor Assembly - Passenger	AG2	Below the right front seat, attached to the seat frame	Passenger Seat Components	M49P Seat Motor Assembly - Passenger (AG2)
M64	Starter Motor	—	Attached to the lower right rear of the engine	—	• M64 Starter Motor X1 (L8T+TP3) • M64 Starter Motor X1 (L8T-TP3) • M64 Starter Motor X1 (LV1) • M64 Starter Motor X2
M74D	Window Motor - Driver	A31	Attached to the interior of the left front door	Driver Door Components	M74D Window Motor - Driver
M74P	Window Motor - Passenger	A31	Attached to the interior of the right front door	Front Passenger Door Components	M74P Window Motor - Passenger
M75	Windshield Wiper Motor	—	In the left side of the cowl, near the engine compartment	Engine Compartment Components (1 of 2)	M75 Windshield Wiper Motor
P3	Backup Alarm	8S3	In the rear of the vehicle on the frame	Rear of Vehicle Components (Passenger or Cargo)	• P3 Backup Alarm (-Cutaway) • P3 Backup Alarm (Cutaway)
P13	Horn Assembly	—	In the left front engine compartment behind the left headlamp	Engine Compartment Components (1 of 2)	P13 Horn Assembly
P16	Instrument Cluster	—	Attached to the left side of the instrument panel	Instrument Panel Components (1 of 2)	P16 Instrument Cluster
P19AG	Speaker - Left Front Door	—	Attached to the left front door	Driver Door Components	P19AG Speaker - Left Front Door
P19AH	Speaker - Right Front Door	—	Attached to the right front door	Front Passenger Door Components	P19AH Speaker - Right Front Door
P19F	Speaker - Left Rear Cargo Door	US8	Attached to the left cargo door	Rear Door Components (Passenger or Cargo)	P19F Speaker - Left Rear Cargo Door
P19LR	Speaker - Left Rear Roof	Cargo/Passenger	In the left rear headliner of the vehicle	Rear Door Components (Passenger or Cargo)	P19LR Speaker - Left Rear Roof
P19RR	Speaker - Right Rear Roof	Cargo/Passenger	In the right rear upper headliner of the vehicle	Rear Door Components (Passenger or Cargo)	P19RR Speaker - Right Rear Roof
P19T	Speaker - Right Rear Cargo Door	US8	Attached to the right cargo door	Rear Door Components (Passenger or Cargo)	P19T Speaker - Right Rear Cargo Door
P34D	Side Object Detection Indicator - Driver	UFT	Internal to the outside rearview mirror - driver	—	—
P34P	Side Object Detection Indicator - Passenger	UFT	Internal to the outside rearview mirror - passenger	—	—
P43	Collision Alert Indicators	UFL	Within the instrument cluster	Instrument Panel Components (1 of 2)	P43 Collision Alert Indicators
Q1A	1-2 Shift Solenoid Valve	MYD	Internal T12 Automatic Transmission Assembly	—	—
Q1B	2-3 Shift Solenoid Valve	MYD	Internal T12 Automatic Transmission Assembly	—	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q2	A/C Compressor Clutch	C60	On the front of the A/C compressor lower right front of engine	• Front of the Engine Components (LV1) • Left Side of the Engine Components (L8T)	Q2 A/C Compressor Clutch
Q6	Camshaft Position Actuator Solenoid Valve	—	Front of the engine behind the center of the water pump	—	Q6 Camshaft Position Actuator Solenoid Valve
Q8	Control Solenoid Valve Assembly	—	Internal to T12 Automatic Transmission Assembly	Automatic Transmission Internal Electrical Components	—
Q12	Evaporative Emission Purge Solenoid Valve	—	On the top of the engine, rear of the throttle body	• Front of the Engine Components (LV1) • Right Side of the Engine Components (L8T)	Q12 Evaporative Emission Purge Solenoid Valve
Q13	Evaporative Emission Vent Solenoid Valve	—	Attached to the side of the EVAP canister, front of the fuel tank	• Frame and Underbody Components (With NE7) • Frame and Underbody Components (Without NE7)	Q13 Evaporative Emission Vent Solenoid Valve
Q17A	Fuel Injector 1	—	On the left side of the intake manifold, at the #1 cylinder intake port	• Top of Engine Components (L8T) • Top of the Engine Components (LV1)	Q17A Fuel Injector 1
Q17B	Fuel Injector 2	—	On the right side of the intake manifold, at the #2 cylinder intake port	• Top of Engine Components (L8T) • Top of the Engine Components (LV1)	Q17B Fuel Injector 2
Q17C	Fuel Injector 3	—	On the left side of the intake manifold, at the #3 cylinder intake port	• Top of Engine Components (L8T) • Top of the Engine Components (LV1)	Q17C Fuel Injector 3
Q17D	Fuel Injector 4	—	On the right side of the intake manifold, at the #4 cylinder intake port	• Top of Engine Components (L8T) • Top of the Engine Components (LV1)	Q17D Fuel Injector 4
Q17E	Fuel Injector 5	—	On the left side of the intake manifold, at the #5 cylinder intake port	• Top of Engine Components (L8T) • Top of the Engine Components (LV1)	Q17E Fuel Injector 5
Q17F	Fuel Injector 6	—	On the right side of the intake manifold, at the #6 cylinder intake port	• Top of Engine Components (L8T) • Top of the Engine Components (LV1)	Q17F Fuel Injector 6

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
Q17G	Fuel Injector 7	L8T	On the left side of the intake manifold, at the #7 cylinder intake port	Top of Engine Components (L8T)	Q17G Fuel Injector 7 (L8T)
Q17H	Fuel Injector 8	L8T	On the right side of the intake manifold, at the #8 cylinder intake port	Top of Engine Components (L8T)	Q17H Fuel Injector 8 (L8T)
Q27A	Pressure Control Solenoid Valve 1	MYD	Internal to T12 Automatic Transmission Assembly	—	—
Q27B	Pressure Control Solenoid Valve 2	MYD	Internal to T12 Automatic Transmission Assembly	—	—
Q27C	Pressure Control Solenoid Valve 3	MYD	Internal to T12 Automatic Transmission Assembly	—	—
Q27D	Pressure Control Solenoid Valve 4	MYD	Internal to T12 Automatic Transmission Assembly	—	—
Q27E	Pressure Control Solenoid Valve 5	MYD	Internal to T12 Automatic Transmission Assembly	—	—
Q38	Throttle Body	—	Attached to the center front of the intake manifold	• Front of the Engine Components (LV1) • Right Side of the Engine Components (L8T)	Q38 Throttle Body
Q39A	Torque Converter Clutch Pressure Control Solenoid Valve	MYD	Internal to T12 Automatic Transmission Assembly	—	—
Q44	Engine Oil Pressure Control Solenoid Valve	L8T	In the engine compartment, at the front of the engine, behind the front cover	Right Side of the Engine Components (L8T)	Q44 Engine Oil Pressure Control Solenoid Valve (L8T)
Q77A	Transmission Control Solenoid Valve 1	M5U	Under the vehicle, internal to the Transmision Assembly	—	Q77A Transmission Control Solenoid Valve 1 (M5U)
Q77B	Transmission Control Solenoid Valve 2	M5U	Under the vehicle, internal to the Transmision Assembly	—	Q77B Transmission Control Solenoid Valve 2 (M5U)
Q77C	Transmission Control Solenoid Valve 3	M5U	Under the vehicle, internal to the Transmision Assembly	—	Q77C Transmission Control Solenoid Valve 3 (M5U)
Q77D	Transmission Control Solenoid Valve 4	M5U	Under the vehicle, internal to the Transmision Assembly	—	Q77D Transmission Control Solenoid Valve 4 (M5U)
Q77E	Transmission Control Solenoid Valve 5	M5U	Under the vehicle, internal to the Transmision Assembly	—	Q77E Transmission Control Solenoid Valve 5 (M5U)
Q77F	Transmission Control Solenoid Valve 6	M5U	Under the vehicle, internal to the Transmision Assembly	—	Q77F Transmission Control Solenoid Valve 6 (M5U)
Q77G	Transmission Control Solenoid Valve 7	M5U	Under the vehicle, internal to the Transmision Assembly	—	Q77G Transmission Control Solenoid Valve 7 (M5U)
Q77H	Transmission Control Solenoid Valve 8	M5U	Under the vehicle, internal to the Transmision Assembly	—	Q77H Transmission Control Solenoid Valve 8 (M5U)
Q77J	Transmission Control Solenoid Valve 9	M5U	Under the vehicle, internal to the Transmision Assembly	—	Q77J Transmission Control Solenoid Valve 9 (M5U)
R3	Blower Motor Resistor	—	Right rear of the engine compartment, attached to the evaporator case	Engine Compartment Components (1 of 2)	R3 Blower Motor Resistor

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
R3B	Blower Motor Resistor - Auxiliary	C36/C69	In the left rear of the passenger compartment, attached to the auxiliary HVAC module	Auxiliary HVAC Components (C36/C69)	R3B Blower Motor Resistor - Auxiliary
R6A	Terminating Resistor - High Speed Bus	—	In the engine compartment	• Engine Compartment Components (1 of 2) • Engine Harness Routing - Front (LV1)	R6A Terminating Resistor - High Speed Bus
S2	Transmission Manual Shift Switch	—	Mounted on the shift lever, extending from the right side of the steering column	—	S2 Transmission Manual Shift Switch
S13A	Door Lock Switch - Rear Cargo	Passenger/Cargo with AU3	Attached to the right cargo door accessory mount plate	Rear Door Components (Passenger or Cargo)	S13A Door Lock Switch - Rear Cargo
S13D	Door Lock Switch - Driver	AU3	Attached to the left front door accessory mount plate	Driver Door Components	S13D Door Lock Switch - Driver
S13P	Door Lock Switch - Passenger	AU3	Attached to the right front door accessory mount plate	Front Passenger Door Components	S13P Door Lock Switch - Passenger
S16	Driver Information Center Switch	—	On the dash, just to the left of P16 Instrument Cluster	Instrument Panel Components (1 of 2)	S16 Driver Information Center Switch
S30	Headlamp Switch	—	At the left side of the instrument panel	Instrument Panel Components (1 of 2)	S30 Headlamp Switch
S33	Horn Switch	—	Inside the upper steering column, behind the inflatable restraint steering wheel module	Steering Column Components (1 of 2)	S33 Horn Switch
S34	HVAC Controls Switch Assembly	—	In the center of the instrument panel	Instrument Panel Components (1 of 2)	• S34 HVAC Controls Switch Assembly X1 • S34 HVAC Controls Switch Assembly X2 • S34 HVAC Controls Switch Assembly X3 • S34 HVAC Controls Switch Assembly X4
S34F	HVAC Controls Switch Assembly - Auxiliary Front	C36/C69	On the front of the overhead console	Headliner Components - Front	• S34F HVAC Controls Switch Assembly - Auxiliary Front (With Rear HVAC Controls) • S34F HVAC Controls Switch Assembly - Auxiliary Front (Without Rear HVAC Controls)
S34R	HVAC Controls Switch Assembly - Auxiliary Rear	C36/C69 with Rear HVAC Controls	In the headliner, near the center of the vehicle	Headliner Components - Rear	S34R HVAC Controls Switch Assembly - Auxiliary Rear
S39	Ignition Switch	—	On the right side of the steering column	Steering Column Components (1 of 2)	S39 Ignition Switch
S40	Passenger Air Bag Disable Switch	C99	In the center of the instrument panel	Instrument Panel Components (1 of 2)	S40 Passenger Air Bag Disable Switch

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
S51	Telematics Button Assembly	UE1	In the center of the instrument panel, just below the radio	Instrument Panel Components (1 of 2)	S51 Telematics Button Assembly
S52	Outside Rearview Mirror Switch	DE5	Attached to the left front door accessory mount plate	Driver Door Components	S52 Outside Rearview Mirror Switch
S64D	Seat Adjuster Switch - Driver	AG1	Attached to the front panel of the driver seat	Driver Seat Components	S64D Seat Adjuster Switch - Driver (AG1)
S64P	Seat Adjuster Switch - Passenger	AG2	Attached to the front panel of the front passenger seat	Passenger Seat Components	S64P Seat Adjuster Switch - Passenger (AG2)
S70L	Steering Wheel Controls Switch - Left	K34	On the left steering wheel spoke	—	S70L Steering Wheel Controls Switch - Left (K34)
S70R	Steering Wheel Controls Switch - Right	W1Y	On the right steering wheel spoke	—	S70R Steering Wheel Controls Switch - Right (W1Y)
S74	Tow/Haul Mode Switch	MYD	In the center of the instrument panel	Instrument Panel Components (1 of 2)	S74 Tow/Haul Mode Switch
S75	Traction Control Switch	—	In the center of the instrument panel	—	S75 Traction Control Switch
S78	Turn Signal/Multifunction Switch	—	On the left side of the steering column	Steering Column Components (1 of 2)	• S78 Turn Signal/Multifunction Switch X1 • S78 Turn Signal/Multifunction Switch X2 • S78 Turn Signal/Multifunction Switch X3
S79D	Window Switch - Driver	A31	Attached to the left front door accessory mount plate	Driver Door Components	S79D Window Switch - Driver
S79P	Window Switch - Passenger	A31	Attached to the right front door accessory mount plate	Front Passenger Door Components	S79P Window Switch - Passenger
S85	Auxiliary Blower Motor Switch	C36/C69	In the center of the instrument panel	—	S85 Auxiliary Blower Motor Switch (C36)
S155	Lane Departure Warning Switch	UFL	Near the center of the instrument panel, below the radio	Instrument Panel Components (1 of 2)	S155 Lane Departure Warning Switch
T1	Accessory DC/AC Power Inverter Module	KI4	Attached to the Instrument Panel Harness	Instrument Panel Components (2 of 2)	T1 Accessory DC/AC Power Inverter Module
T4M	Radio Antenna	—	Mounted on top of the right front fender, adjacent to the hood	Right Rear of the Engine Compartment Components	T4M Radio Antenna
T4S	Wireless Communication Antenna - Bluetooth	UE1	Internal to K73 Telematics Communication Interface Control Module	—	—
T8A	Ignition Coil 1	—	On the left rocker cover center at cylinder 1	• Right Side of the Engine Components (L8T) • Top of the Engine Components (LV1)	T8A Ignition Coil 1

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
T8B	Ignition Coil 2	—	On the right rocker cover center at cylinder 2	• Left Side of the Engine Components (L8T) • Top of the Engine Components (LV1)	T8B Ignition Coil 2
T8C	Ignition Coil 3	—	On the left rocker cover center at cylinder 3	• Right Side of the Engine Components (L8T) • Top of the Engine Components (LV1)	T8C Ignition Coil 3
T8D	Ignition Coil 4	—	On the right rocker cover center at cylinder 4	• Left Side of the Engine Components (L8T) • Top of the Engine Components (LV1)	T8D Ignition Coil 4
T8E	Ignition Coil 5	—	On the left rocker cover center at cylinder 5	• Right Side of the Engine Components (L8T) • Top of the Engine Components (LV1)	T8E Ignition Coil 5
T8F	Ignition Coil 6	—	On the right rocker cover center at cylinder 6	• Left Side of the Engine Components (L8T) • Top of the Engine Components (LV1)	T8F Ignition Coil 6
T8G	Ignition Coil 7	L8T	On the left rocker cover rear at cylinder 7	Right Side of the Engine Components (L8T)	T8G Ignition Coil 7
T8H	Ignition Coil 8	L8T	On the right rocker cover rear at cylinder 8	Left Side of the Engine Components (L8T)	T8H Ignition Coil 8
T12	Automatic Transmission Assembly	—	Under the vehicle attached to the rear of the engine	Left Side of the Engine Components (L8T)	T12 Automatic Transmission Assembly
T35X	Radio Antenna - XM	U2K	On the roof top above the driver side	—	—
W8	Blunt Cut - Trailer Provision	UY7	Behind the instrument panel, near the steering column	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Instrument Panel Harness Routing - Driver Side	—
W12	Blunt Cut - Emergency Vehicle Provision	YF1	Near the instrument panel	—	—
W22	Blunt Cut - Rear Speaker Provision	CUTAWAY with YF1	Near the instrument panel	Body Harness Routing - Left Front Passenger Compartment (Cutaway)	—
W25	Blunt Cut - Configurable Provision	9L7	Near the instrument panel	—	—
X50A	Fuse Block - Underhood	—	In the engine compartment, attached to the left front fender	Engine Compartment Components (1 of 2)	Electrical Center Identification Views on page 6-16

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X50B	Fuse Block - Underhood Auxiliary	—	In the engine compartment	Engine Compartment Components (9L7)	Electrical Center Identification Views on page 6-16
X52A	Fuse Block - Passenger Compartment	—	Below the driver seat	Passenger Compartment Components	Electrical Center Identification Views on page 6-16
X53A	Fuse Block - Rear Body	PRP	Within the cargo area	—	Electrical Center Identification Views on page 6-16
X55U	Fuse Holder - Starter	—	In the engine compartment, passenger side, near the battery	—	Electrical Center Identification Views on page 6-16
X80A	Accessory Power Receptacle - Center Console 1	—	In the center of the instrument panel	Instrument Panel Components (1 of 2)	X80A Accessory Power Receptacle - Center Console 1
X80B	Accessory Power Receptacle - Center Console 2	—	In the right center of the instrument panel	Instrument Panel Components (1 of 2)	X80B Accessory Power Receptacle - Center Console 2
X81	Accessory Power Receptacle - 110V AC	KI4	Within the passenger compartment	Instrument Panel Components (1 of 2)	• X81 Accessory Power Receptacle - 110V AC X1 • X81 Accessory Power Receptacle - 110V AC X2
X84	Data Link Connector	—	Left lower side of the instrument panel, near the park brake pedal assembly	• Instrument Panel Components (1 of 2) • Instrument Panel Components (1 of 2)	X84 Data Link Connector
X85	Steering Wheel Air Bag Coil	—	Inside the upper steering column	—	• X85 Steering Wheel Air Bag Coil X1 • X85 Steering Wheel Air Bag Coil X2 • X85 Steering Wheel Air Bag Coil X3
X87RB	Sliding Door Jamb Contact Plate - Right Body	AU3 with E24/YA2	Attached to the right B-pillar	• Passenger Compartment Components • Right Side Hinged Door Components (E24) • Right Side Sliding Door Components (YA2)	• X87RB Sliding Door Jamb Contact Plate - Right Body (Body) • X87RB Sliding Door Jamb Contact Plate - Right Body (Door)
X88	Trailer Connector	UY7	Below the rear bumper, near the center	Rear of Vehicle Components (Passenger or Cargo)	• X88 Trailer Connector (-NE7) • X88 Trailer Connector (NE7)
X92	USB Receptacle	USR	Slightly below and to the right of A11 Radio	Instrument Panel Components (1 of 2)	X92 USB Receptacle

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X100	Instrument Panel Wiring Harness to Engine Wiring Harness	—	Left rear of the engine compartment near the underhood fuse block and the horn	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Front (LV1) • Instrument Panel Harness Routing - Engine Compartment	X100 Instrument Panel Wiring Harness to Engine Wiring Harness
X101	Engine Wiring Harness to Chassis Wiring Harness	—	Left rear of the engine compartment behind the underhood fuse block	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Chassis Harness Routing - Underbody (Cutaway) (-NE7) • Chassis Harness Routing - Underbody (Passenger or Cargo with LWB) • Chassis Harness Routing - Underbody (Passenger or Cargo with SWB) • Engine Harness Routing - Front (L8T) • Engine Harness Routing - Front (LV1)	X101 Engine Wiring Harness to Chassis Wiring Harness
X102	Chassis Wiring Harness to Fuel Tank Wiring Harness	—	Under the vehicle, near the fuel tank	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Chassis Harness Routing - Underbody (Cutaway) (-NE7) • Chassis Harness Routing - Underbody (Passenger or Cargo with LWB) • Chassis Harness Routing - Underbody (Passenger or Cargo with SWB) • Engine Harness Routing - Front (LV1)	X102 Chassis Wiring Harness to Fuel Tank Wiring Harness
X103	Engine Wiring Harness to Starter Motor Jumper Wiring Harness	—	In the engine compartment, right rear of engine block, near the starter	• Engine Harness Routing - Rear (L8T) • Engine Harness Routing - Rear (LV1)	X103 Engine Wiring Harness to Starter Motor Jumper Wiring Harness

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X104	Instrument Panel Wiring Harness to Air Bag Jumper Wiring Harness	—	Instrument Panel wiring harness to Air Bag Jumper wiring harness, bottom left side of the radiator support	Instrument Panel Harness Routing - Engine Compartment	X104 Instrument Panel Wiring Harness to Air Bag Jumper Wiring Harness
X109	Engine Wiring Harness to Underhood Lamp Wiring Harness	TR9	Engine wiring harness to Underhood Lamp wiring harness, left rear of the engine compartment	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Front (LV1)	X109 Engine Wiring Harness to Underhood Lamp Wiring Harness
X130	Engine Wiring Harness to Camshaft Position Sensor Jumper Wiring Harness	—	In the engine compartment, on the left rear side of engine block	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Front (LV1)	X130 Engine Wiring Harness to Camshaft Position Sensor Jumper Wiring Harness
X135	Engine Jumper Wiring Harness to Oil Pump Flow Control Solenoid Valve Wire Wiring Harness	L8T	In the engine compartment, on the left rear side of engine block	Engine Harness Routing - Front (L8T)	X135 Engine Jumper Wiring Harness to Oil Pump Flow Control Solenoid Valve Wire Wiring Harness (L8T)
X141	Instrument Panel Wiring Harness to Brake Fluid Level Indicator Wiring Harness	UJ1	Instrument panel wiring harness to the brake fluid alarm switch jumper wiring harness, left rear of the engine compartment near the cowl	• Brake Booster Fluid Alarm Switches (UJ1) • Instrument Panel Harness Routing - Engine Compartment	X141 Instrument Panel Wiring Harness to Brake Fluid Level Indicator Wiring Harness
X150	Instrument Panel Wiring Harness to Forward Lamp Wiring Harness	—	Instrument panel wiring harness to the forward lamp wiring harness, near the upper radiator hose at the radiator entry point	Forward Lamp Harness Routing	X150 Instrument Panel Wiring Harness to Forward Lamp Wiring Harness
X155	Engine Wiring Harness to Engine Coolant Temperature Sensor Wiring Harness	—	Engine wiring harness to Engine Oil Pressure Sensor Jumper wiring harness, in the engine compartment, left front of the engine, near the power steering pump	Engine Harness Routing - Front (L8T)	X155 Engine Wiring Harness to Engine Coolant Temperature Sensor Wiring Harness (L8T)
X160	Engine Wiring Harness to Fuel Injector Wiring Harness	—	In the engine compartment, rear of the engine near the top center	• Engine Harness Routing - Rear (L8T) • Engine Harness Routing - Rear (LV1) • Fuel Injector Harness Routing (LV1)	• X160 Engine Wiring Harness to Fuel Injector Wiring Harness (L8T) • X160 Engine Wiring Harness to Fuel Injector Wiring Harness (LV1)
X161	Engine Wiring Harness to Fuel Injector Wiring Harness	—	In the engine compartment, rear of the engine near the top right	• Engine Harness Routing - Rear (L8T) • Engine Harness Routing - Rear (LV1) • Fuel Injector Harness Routing (LV1)	• X161 Engine Wiring Harness to Fuel Injector Wiring Harness (L8T) • X161 Engine Wiring Harness to Fuel Injector Wiring Harness (LV1)
X175	Engine Wiring Harness to Automatic Transmission Wiring Harness	M5U	Engine wiring harness to the transmission jumper wiring harness	Engine Harness Routing - Rear (LV1)	X175 Engine Wiring Harness to Automatic Transmission Wiring Harness (M5U)

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X176	Automatic Transmission Wiring Harness to Automatic Transmission Wiring Harness (M5U)	M5U	Internal to the transmission	—	X176 Automatic Transmission Wiring Harness to Automatic Transmission Wiring Harness (M5U)
X178	Automatic Transmission Wiring Harness to Automatic Transmission Output Speed Sensor Wiring Harness	M5U	Transmission wiring harness to the transmission speed sensor wiring harness	—	X178 Automatic Transmission Wiring Harness to Automatic Transmission Output Speed Sensor Wiring Harness (M5U)
X185	Instrument Panel Wiring Harness to Chassis Wiring Harness	—	In the engine compartment, near the X50A fuse block - underhood	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Chassis Harness Routing - Underbody (Cutaway) (-NE7) • Chassis Harness Routing - Underbody (Passenger or Cargo with LWB) • Chassis Harness Routing - Underbody (Passenger or Cargo with SWB) • Instrument Panel Harness Routing - Engine Compartment	X185 Instrument Panel Wiring Harness to Chassis Wiring Harness
X190	Accessory Wiring Harness to Accessory Power Fuse Block Rear Wiring Harness Extension Harness	—	In the engine compartment	Upfitter Provision Harness Routing - Engine Compartment (9L7)	X190 Accessory Wiring Harness to Accessory Power Fuse Block Rear Wiring Harness Extension Harness
X200	Steering Wheel Air Bag Coil Jumper Wiring Harness to Instrument Panel Wiring Harness	—	Steering column wiring harness to the instrument panel wiring harness, at the base of the steering column	• Instrument Panel Harness Routing - Rear of Instrument Panel • Steering Column Harness Routing	X200 Steering Wheel Air Bag Coil Jumper Wiring Harness to Instrument Panel Wiring Harness
X202	Instrument Panel Wiring Harness to Engine Wiring Harness	—	Instrument panel wiring harness to engine wiring harness, about 8.8 inches (225 mm) from I/P underhood break out after pass through grommet	• Engine Harness Routing - Front (L8T) • Instrument Panel Harness Routing - Engine Compartment	X202 Instrument Panel Wiring Harness to Engine Wiring Harness
X204	Body Wiring Harness to Roof Console Wiring Harness	—	Body wiring harness to headliner wiring harness,	• Body Harness Routing - Right Front Passenger Compartment • Roof Harness Routing - Front	X204 Body Wiring Harness to Roof Console Wiring Harness

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X205	Roof Console Wiring Harness to Body Wiring Harness	—	Front headliner wiring harness to the body wiring harness, behind the A-pillar	• Body Harness Routing - Right Front Passenger Compartment • Roof Harness Routing - Front	X205 Roof Console Wiring Harness to Body Wiring Harness
X206	Instrument Panel Wiring Harness to Instrument Panel Wiring Harness	—	Instrument Panel wiring harness to Instrument Panel wiring harness, left side of the instrument panel near the headlamp switch	Instrument Panel Harness Routing - Rear of Instrument Panel	X206 Instrument Panel Wiring Harness to Instrument Panel Wiring Harness
X220	Instrument Panel Wiring Harness to Park Brake Switch Jumper Wiring Harness	—	Instrument panel wiring harness to the parking brake jumper wiring harness, left side of the instrument panel, center of the parking brake pedal assembly	Instrument Panel Harness Routing - Driver Side	X220 Instrument Panel Wiring Harness to Park Brake Switch Jumper Wiring Harness
X221	Instrument Panel Wiring Harness to Antenna Wiring Harness	—	Instrument Panel Wiring Harness to Antenna Wiring Harness, behind the passenger kick panel	Instrument Panel Harness Routing - Rear of Instrument Panel	X221 Instrument Panel Wiring Harness to Antenna Wiring Harness
X225	Accelerator Control Wiring Harness to Instrument Panel Wiring Harness	—	Accelerator Pedal Position (APP) Jumper wiring harness to Instrument Panel wiring harness, located between Accelerator Pedal Position (APP) sensor and Instrument Panel wiring harness	Instrument Panel Harness Routing - Rear of Instrument Panel	X225 Accelerator Control Wiring Harness to Instrument Panel Wiring Harness
X289	Side Access Panel Wiring Harness to Instrument Panel Wiring Harness	PRP	Inside the vehicle, towards the left front	Body Harness Routing - Left Front Passenger Compartment (Cutaway)	X289 Side Access Panel Wiring Harness to Instrument Panel Wiring Harness
X290	Instrument Panel Wiring Harness to Side Access Panel Wiring Harness	PRP	Inside the vehicle, towards the left front	—	X290 Instrument Panel Wiring Harness to Side Access Panel Wiring Harness
X291	Accessory Power Fuse Block Rear Wiring Harness Extension Harness to Accessory Power Fuse Block Rear Wiring Harness Extension Harness	—	In the engine compartment	Upfitter Provision Harness Routing - Engine Compartment (9L7)	X291 Accessory Power Fuse Block Rear Wiring Harness Extension Harness to Accessory Power Fuse Block Rear Wiring Harness Extension Harness
X306	Body Wiring Harness to Seat Wiring Harness - Passenger	—	Body wiring harness to the front passenger seat wiring harness, right side of the passenger compartment below the passenger seat	• Body Harness Routing - Right Front Passenger Compartment • Driver Seat Harness Routing and Front Passenger Seat Harness Routing • Passenger Seat Components	X306 Body Wiring Harness to Seat Wiring Harness - Passenger

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X307	Body Wiring Harness to Seat Wiring Harness - Driver	—	Body wiring harness to the driver seat wiring harness, left side of the passenger compartment below the driver seat	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Passenger) • Driver Seat Components • Driver Seat Harness Routing and Front Passenger Seat Harness Routing	X307 Body Wiring Harness to Seat Wiring Harness - Driver
X318	Instrument Panel Wiring Harness to Body Wiring Harness	—	Instrument panel wiring harness to the body wiring harness, behind the left kick panel	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Left Front Passenger Compartment (Passenger) • Instrument Panel Harness Routing - Driver Side	X318 Instrument Panel Wiring Harness to Body Wiring Harness
X319	Auxiliary Heater Front Wiring Harness to Body Wiring Harness	ENC/C69/C36	Rear heater switch wiring harness to the body wiring harness, behind the left kick panel	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Left Front Passenger Compartment (Passenger)	X319 Auxiliary Heater Front Wiring Harness to Body Wiring Harness
X323	Airbag Wiring Harness to Body Wiring Harness	ASF	At the base of the left C-pillar	Body Harness Routing - Left Front Passenger Compartment (Passenger)	X323 Airbag Wiring Harness to Body Wiring Harness
X324	Airbag Wiring Harness to Body Wiring Harness	ASF	At the base of the right C-pillar	Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)	X324 Airbag Wiring Harness to Body Wiring Harness

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X329	Instrument Panel Wiring Harness to Body Wiring Harness	UVC	Instrument panel wiring harness to the body wiring harness, in the passenger compartment under the driver seat	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Left Front Passenger Compartment (Passenger) • Instrument Panel Harness Routing - Driver Side	X329 Instrument Panel Wiring Harness to Body Wiring Harness
X330	Instrument Panel Wiring Harness to Body Wiring Harness	—	Instrument panel wiring harness to the body wiring harness, under the driver seat	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Left Front Passenger Compartment (Passenger) • Instrument Panel Harness Routing - Driver Side	X330 Instrument Panel Wiring Harness to Body Wiring Harness
X331	Instrument Panel Wiring Harness to Body Wiring Harness	—	Instrument panel wiring harness to the body wiring harness, under the driver seat	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Left Front Passenger Compartment (Passenger) • Instrument Panel Harness Routing - Driver Side	X331 Instrument Panel Wiring Harness to Body Wiring Harness
X400	Rear Door Door Wiring Harness to Body Wiring Harness	Passenger/Cargo	Right cargo door wiring harness to the body wiring harness, right rear of the passenger compartment center of the right D-pillar	• Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger) • Door Harness Routing - Passenger Rear (Passenger or Cargo)	X400 Rear Door Door Wiring Harness to Body Wiring Harness

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X403	Rear Door Door Wiring Harness to Body Wiring Harness	UVC	Rear cargo door wiring harness to body wiring harness,	• Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger) • Door Harness Routing - Passenger Rear (Passenger or Cargo)	• X403 Rear Door Door Wiring Harness to Body Wiring Harness (-Cutaway) • X403 Rear Door Door Wiring Harness to Body Wiring Harness (Cutaway)
X405	Chassis Wiring Harness to Chassis Wiring Harness	Cutaway	Cutaway rear lighting connector to the chassis wiring harness, left rear frame rail	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Chassis Harness Routing - Underbody (Cutaway) (-NE7)	• X405 Chassis Wiring Harness to Chassis Wiring Harness (-Cutaway) • X405 Chassis Rear Wiring Harness Extension Harness to Chassis Wiring Harness (Cutaway)
X407	Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness	C36/C69	Rear HVAC wiring harness to the body wiring harness, left rear of the passenger compartment upper back side of the auxiliary HVAC module at the D-pillar	• Auxiliary HVAC Harness Routing - Left Rear Passenger Compartment (C36/C69) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Left Rear Passenger Compartment (Cargo) • Body Harness Routing - Left Rear Passenger Compartment (Passenger)	X407 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness
X408	Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness	UD7/UFT	Rear bumper wiring harness to chassis wiring harness,	• Chassis Harness Routing - Underbody (Passenger or Cargo with LWB) • Chassis Harness Routing - Underbody (Passenger or Cargo with SWB) • Rear Bumper Harness Routing	X408 Rear Object Alarm Sensor Wiring Harness to Chassis Wiring Harness

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X409	Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness	C36/C69	Rear HVAC wiring harness to body wiring harness, left rear of the passenger compartment upper back side of the auxiliary HVAC module	• Auxiliary HVAC Harness Routing - Left Rear Passenger Compartment (C36/C69) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Left Rear Passenger Compartment (Cargo) • Body Harness Routing - Left Rear Passenger Compartment (Passenger)	X409 Auxiliary Heater and Air Conditioning Wiring Harness to Body Wiring Harness
X410	Tail Lamp Wiring Harness to Body Wiring Harness	Passenger/Cargo	Left Tail Lamp Assembly wiring harness to Body wiring harness, left rear of the passenger compartment at the D-pillar	• Body Harness Routing - Left Rear Passenger Compartment (Cargo) • Body Harness Routing - Left Rear Passenger Compartment (Passenger)	X410 Tail Lamp Wiring Harness to Body Wiring Harness
X411	Rear Door Door Wiring Harness - Left to Body Wiring Harness	Passenger/Cargo	Left cargo door wiring harness to the body wiring harness, left rear of the passenger compartment center of the left D-pillar	• Body Harness Routing - Left Rear Passenger Compartment (Cargo) • Body Harness Routing - Left Rear Passenger Compartment (Passenger) • Door Harness Routing - Driver Rear (Passenger or Cargo)	X411 Rear Door Door Wiring Harness - Left to Body Wiring Harness
X412	Rear Door Door Wiring Harness to Body Wiring Harness	Passenger/Cargo	Right cargo door wiring harness to the body wiring harness, right rear of the passenger compartment center of the right D-pillar	• Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger) • Door Harness Routing - Passenger Rear (Passenger or Cargo)	X412 Rear Door Door Wiring Harness to Body Wiring Harness
X415	Radio Rear Speaker Wiring Harness to Body Wiring Harness	Passenger/Cargo	Rear overhead speakers jumper wiring harness to the body wiring harness, rear of the passenger compartment center of the rear roof rail	Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)	X415 Radio Rear Speaker Wiring Harness to Body Wiring Harness

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X419	Center High Mounted Stop Lamp Jumper Wiring Harness to Body Wiring Harness	Passenger/Cargo	CHMSL wiring harness to the body wiring harness, rear of the passenger compartment center of the rear roof rail	• Body Harness Routing - Left Rear Passenger Compartment (Cargo) • Body Harness Routing - Left Rear Passenger Compartment (Passenger)	X419 Center High Mounted Stop Lamp Jumper Wiring Harness to Body Wiring Harness
X420	Tail Lamp Wiring Harness to Body Wiring Harness	Passenger/Cargo	Right Tail Lamp Assembly wiring harness to Body wiring harness, right rear of the passenger compartment at the D-pillar	Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)	X420 Tail Lamp Wiring Harness to Body Wiring Harness
X421	Roof Console Wiring Harness to Body Wiring Harness	—	Body wiring harness to rear headliner wiring harness	• Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger) • Roof Harness Routing - Rear	X421 Roof Console Wiring Harness to Body Wiring Harness
X450	Trailer Jumper Wiring Harness to Chassis Wiring Harness	NE7	Trailer Jumper Wiring Harness to Chassis Wiring Harness, at the rear of the vehicle	—	X450 Trailer Jumper Wiring Harness to Chassis Wiring Harness (NE7)
X460	Chassis Wiring Harness to Chassis Wiring Harness	Cutaway with UY7 and NE7	Trailer Provision to Chassis wiring harness, in rear near Trailer wiring harness	Chassis Harness Routing - Underbody (Cutaway) (NE7)	X460 Chassis Wiring Harness to Chassis Wiring Harness
X500	Front Side Door Door Wiring Harness - Driver to Body Wiring Harness	—	Driver door wiring harness to the body wiring harness, behind the left kick panel	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Left Front Passenger Compartment (Passenger) • Door Harness Routing - Driver Door	X500 Front Side Door Door Wiring Harness - Driver to Body Wiring Harness
X501	Airbag Wiring Harness to Front Side Door Door Wiring Harness - Driver	ASF	Driver side impact sensor wiring harness to the driver door wiring harness, in the driver door behind the trim panel	Door Harness Routing - Driver Door	X501 Airbag Wiring Harness to Front Side Door Door Wiring Harness - Driver
X600	Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness	—	Passenger door wiring harness to the body wiring harness, behind the right kick panel	• Body Harness Routing - Right Front Passenger Compartment • Door Harness Routing - Passenger Door	X600 Front Side Door Door Wiring Harness - Passenger to Body Wiring Harness

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
X601	Side Impact Sensor - Right Front Jumper Wiring Harness to Front Side Door Door Wiring Harness - Passenger	ASF	Passenger side impact sensor wiring harness to the passenger door wiring harness, in the passenger door behind the trim panel	Door Harness Routing - Passenger Door	X601 Side Impact Sensor - Right Front Jumper Wiring Harness to Front Side Door Door Wiring Harness - Passenger
X901	Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness - Left	C49	Rear window defogger jumper wiring harness to the left cargo door wiring harness, in the left cargo door	Door Harness Routing - Driver Rear (Passenger or Cargo)	X901 Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness - Left
X902	Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness	C49	Rear window defogger jumper wiring harness to the right cargo door wiring harness, in the right cargo door	Door Harness Routing - Passenger Rear (Passenger or Cargo)	X902 Rear Window Defogger Wiring Harness to Rear Door Door Wiring Harness
G100	Forward Lamp Wiring Harness	—	Left front of the engine compartment, attached to the front of the left fender	G100 and G101	—
G101	Forward Lamp Wiring Harness	—	Right front of the engine compartment, attached near the front of the right fender	G100 and G101	—
G102	Engine Wiring Harness	—	Rear of the engine compartment, left rear of the engine on the left cylinder head	• G102 and G103 (L8T) • G102 and G103 (LV1)	—
G103	Engine Wiring Harness	—	Rear of the engine compartment, left rear of the engine on the left cylinder head	• G102 and G103 (L8T) • G102 and G103 (LV1)	—
G104	Negative Battery Cable	—	Mounted on the engine, extending towards the battery	• G104 (L8T) • G104 (LV1)	—
G105	Negative Battery Cable	—	Front of the engine compartment, right front of the inner frame rail	G105 and G106	—
G106	Negative Battery Cable	—	Front of the engine compartment, right front fender	G105 and G106	—
G107	Engine Wiring Harness	LV1	Rear of the engine compartment, right rear of the engine on the right cylinder head	G107 and G108 (LV1)	—
G108	Engine Wiring Harness	—	Rear of the engine compartment, left rear of the engine on the left cylinder head	G107 and G108 (LV1)	—
G109	Accessory Wiring Harness	9L7	In the engine compartment, passenger side, attached to the inner fender	G109 (9L7)	—
G300	Chassis Wiring Harness	—	Left side outer frame, rear of the front tire, near the body mount	G300 and G404 (Passenger or Cargo)	—
G301	Instrument Panel	—	Left front of the passenger compartment, behind the kick panel next to G302	G301 and G302	—
G302	Instrument Panel	—	Left front of the passenger compartment, behind the kick panel next to G301	G301 and G302	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
G304	Instrument Panel	—	Right front of the passenger compartment, behind the kick panel	G304	—
G305	Auxiliary Battery Negative Cable	TP3	Left center outer frame rail, near the auxiliary battery	G305	—
G347	Body Wiring Harness	—	Left side of the passenger compartment, lower left B-pillar part of JX347	—	—
G348	Body Wiring Harness	—	Right side of the passenger compartment, lower right B-pillar part of JX348	—	—
G401	Body Wiring Harness	Passenger/Cargo	Right rear of the passenger compartment, upper right D-pillar	G401 and G402 (Passenger or Cargo)	—
G402	Body Wiring Harness	Passenger/Cargo	Left rear of the passenger compartment, center left D-pillar	G401 and G402 (Passenger or Cargo)	—
G403	Side Access Panel Wiring Harness	PRP	Left rear of the passenger compartment, center left D-pillar	—	—
G404	Chassis Wiring Harness	—	In vehicle underbody, near center, on left frame rail	• G300 and G404 (Passenger or Cargo) • G404 (Cutaway)	—
J100	Forward Lamp Wiring Harness	—	At the left front of the engine compartment, just behind the left front headlamp assembly	Forward Lamp Harness Routing	—
J101	Engine Wiring Harness	—	In the engine wiring harness, on the right side of the engine, approximately 5 cm (2 in) from the MAP sensor breakout	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Front (LV1)	—
J102	Engine Wiring Harness	—	In the engine wiring harness, on the right side of the engine, approximately 6 cm (2 in) from the MAP sensor breakout	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Rear (LV1)	—
J104	Fuse Block Jumper Wiring Harness	9L7	In the fuse block jumper wiring harness, approximately 84.0 cm (33.07 in) from the fuse block - underhood auxiliary	Upfitter Provision Harness Routing - Engine Compartment (9L7)	—
J105	Fuse Block Jumper Wiring Harness	9L7	In the fuse block jumper wiring harness, approximately 54.0 cm (21.26 in) from the fuse block - underhood auxiliary	Upfitter Provision Harness Routing - Engine Compartment (9L7)	—
J106	Fuse Block Jumper Wiring Harness	9L7	In the fuse block jumper wiring harness, approximately 36.5 cm (14.37 in) from the fuse block - underhood auxiliary	Upfitter Provision Harness Routing - Engine Compartment (9L7)	—
J107	Engine Wiring Harness	—	In the engine wiring harness, approximately 11.5 cm (4.53 in) from the horn assembly breakout	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Front (LV1)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J108	Engine Wiring Harness	L8T	In the engine wiring harness, approximately 10.5 cm (4.0 in) from the engine control module breakout	Engine Harness Routing - Rear (L8T)	—
J110	Forward Lamp Wiring Harness	—	In the forward lamp wiring harness, Left front of the vehicle, approximately 12 cm (5 in) from the left headlamp connector breakout	Forward Lamp Harness Routing	—
J111	Engine Wiring Harness	L8T	In the engine wiring harness, approximately 5.0 cm (2.0 in) from the brake fluid level switch breakout	Engine Harness Routing - Front (L8T)	—
J112	Engine Wiring Harness	—	In the engine wiring harness, approximately 33.5 cm (13.2 in) from the multifunction intake air sensor breakout	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Front (LV1)	—
J115	Engine Wiring Harness	—	In the engine wiring harness, in the right front of the engine compartment, approximately 15 cm (6 in) from the X101 breakout	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Front (LV1)	—
J121	Forward Lamp Wiring Harness	—	In the forward lamp wiring harness, near the front center of the vehicle, approximately 48 cm (19 in) from the left headlamp breakout	Forward Lamp Harness Routing	—
J122	Forward Lamp Wiring Harness	—	In the forward lamp wiring harness, near the left front of the vehicle, approximately 12 cm (5 in) from the underhood fuse block X4 breakout	Forward Lamp Harness Routing	—
J123	Engine Wiring Harness	L8T	In the engine wiring harness, near the left front side of the vehicle, approximately 16 cm (6 in) from the underhood fuse block X1 breakout	Engine Harness Routing - Front (L8T)	—
J127	Automatic Transmission Input and Output Speed Sensor Wiring Harness	MYD	Internal to T12 Automatic Transmission Assembly	—	—
J130	Engine Wiring Harness	—	In the engine wiring harness, approximately 12.5 cm (4.9 in) from the knock sensor 1 breakout	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Rear (LV1)	—
J131	Engine Wiring Harness	—	In the engine wiring harness, approximately 19.5 cm (7.7 in) from the knock sensor 1 breakout	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Rear (LV1)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J143	Engine Wiring Harness	—	Adjacent to B52C Heated Oxygen Sensor - Bank 1 Sensor 1 and B52E Heated Oxygen Sensor - Bank 2 Sensor 1	• Engine Harness Routing - Rear (L8T) • Engine Harness Routing - Rear (LV1)	—
J144	Engine Wiring Harness	—	Adjacent to B52D Heated Oxygen Sensor - Bank 1 Sensor 2 and B52F Heated Oxygen Sensor - Bank 2 Sensor 2	• Engine Harness Routing - Rear (L8T) • Engine Harness Routing - Rear (LV1)	—
J170	Engine Wiring Harness	LV1	In the engine wiring harness, approximately 24.5 cm (9.6 in) from ignition coil 5	Engine Harness Routing - Rear (LV1)	—
J171	Engine Wiring Harness	LV1	In the engine wiring harness, approximately 26 cm (10.2 in) from ignition coil 6	Engine Harness Routing - Rear (LV1)	—
J175	Transmission Internal Wiring Harness	M5U	Within the automatic transmission assembly	—	—
J176	Transmission Internal Wiring Harness	M5U	Within the automatic transmission assembly	—	—
J177	Transmission Internal Wiring Harness	M5U	Within the automatic transmission assembly	—	—
J181	Ignition Coil Jumper Wiring Harness	L8T	In the ignition coil jumper wiring harness for bank 1, approximately 5 cm (2.0 in) from the X126 breakout	Engine Harness Routing - Front (L8T)	—
J182	Left Ignition Coil Wiring Harness	—	In the odd ignition/coil module jumper wiring harness, top left of the engine	• Engine Harness Routing - Front (L8T) • Engine Harness Routing - Front (LV1)	—
J183	Right Ignition Coil Wiring Harness	L8T	In the even ignition/coil module jumper wiring harness, top right of the engine	Engine Harness Routing - Rear (L8T)	—
J184	Left Ignition Coil Wiring Harness	LV1	In the odd ignition/coil module jumper wiring harness, top left of the engine	Engine Harness Routing - Front (LV1)	—
J185	Right Ignition Coil Wiring Harness	LV1	In the even ignition/coil module jumper wiring harness, top right of the engine	Engine Harness Routing - Front (LV1)	—
J188	Right Ignition Coil Wiring Harness	—	In the even ignition/coil module jumper wiring harness, top right of the engine	• Engine Harness Routing - Front (LV1) • Engine Harness Routing - Rear (L8T)	—
J201	Instrument Panel	UFL	In the instrument panel harness, approximately 2 cm (0.79 in) from the park brake switch breakout	Instrument Panel Harness Routing - Driver Side	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J202	Steering Column Wiring Harness	—	In the steering column wiring harness, approximately 25 cm (9 in) from the X200 connector	—	—
J203	Steering Column Wiring Harness	—	In the steering column wiring harness, approximately 27 cm (10.5 in) from the X200 connector	—	—
J205	Steering Column Wiring Harness	—	In the steering column wiring harness, approximately 30 cm (12 in) from the X200 connector	—	—
J207	Instrument Panel	—	In the instrument panel harness, center of the instrument panel, approximately 70 cm (27 in) from the radio and HVAC control assembly breakout	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J208	Steering Wheel Wiring Harness	K34 with W1Y	In the steering wheel wiring harness, near the X200 connector	—	—
J209	Steering Wheel Wiring Harness	K34 with W1Y	In the steering wheel wiring harness, near the X200 connector	—	—
J210	Steering Wheel Wiring Harness	K34/W1Y	In the steering wheel wiring harness, near the X200 connector	—	—
J211	Instrument Panel	UD7/UFT	In the engine compartment, approximately 30 cm (11.8 in) from the windshield washer pump	*Instrument Panel Harness Routing - Engine Compartment*	—
J223	Instrument Panel	UVC	Adjacent to K9 Body Control Module	*Instrument Panel Harness Routing - Driver Side*	—
J241	Instrument Panel	—	In the instrument panel harness, center of the instrument panel, approximately 13.5 cm (5.3 in) from the parking assist control module breakout	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J242	Instrument Panel Wiring Harness	—	In the instrument panel wiring harness	—	—
J244	Instrument Panel	—	In the instrument panel harness, left side of the instrument panel, approximately 12 cm (5 in) from the X200 breakout towards the instrument panel cluster connector	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J245	Instrument Panel	DE5	In the instrument panel harness, center of the instrument panel, approximately 30 cm (12 in) from the radio and HVAC control assembly breakout	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J246	Instrument Panel	DE5	In the instrument panel harness, center of the instrument panel, approximately 43.5 cm (17 in) from the radio and HVAC control assembly breakout	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J247	Instrument Panel	—	In the instrument panel harness, left side of the instrument panel, approximately 36 cm (14.37 in) from the C200 breakout towards the underhood fuse block	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J248	Instrument Panel	—	In the instrument panel harness, left side of the instrument panel, approximately 8 cm (3.14 in) from the C200 breakout towards the instrument panel cluster connector	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J249	Instrument Panel	—	In the instrument panel harness, right side of the instrument panel, approximately 21 cm (8 in) from the G304 breakout	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J250	Instrument Panel	—	In the instrument panel harness, right side of the instrument panel, approximately 5 cm (2.16 in) from the air temperature actuator connector breakout towards the inflatable restraint instrument panel module connector	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J263	Instrument Panel	TP3	In the instrument panel harness, left side of the instrument panel, approximately 36 cm (14.37 in) from the C200 breakout towards the underhood fuse block	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J264	Steering Column Wiring Harness	—	In the steering wheel wiring harness, approximately 20 cm (8 in) from the X200 connector	—	—
J270	Instrument Panel	U2K	In the instrument panel harness, approximately 15 cm (6 in) from the digital radio receiver and cigar lighter connectors breakout	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J271	Instrument Panel	U2K/UE1	In the instrument panel harness, approximately 7.5 cm (3 in) from the vehicle communication interface module and cigar lighter connectors breakout	*Instrument Panel Harness Routing - Rear of Instrument Panel*	—
J280	Instrument Panel	Cutaway without YF7	In the instrument panel harness, approximately 20 cm (7.9 in) from the body fuse block and air bag module connectors breakout	*Instrument Panel Harness Routing - Driver Side*	—
J300	Side Access Panel Wiring Harness	PRP	Slightly forward of X53A Fuse Block - Rear Body	—	—
J302	Instrument Panel	PRP	Adjacent to K9 Body Control Module	—	—
J307	Front Headliner Wiring Harness	C69 with YF7	In the front headliner wiring harness, center of the headliner, approximately 15 cm (6 in) from the X205 breakout towards the left vanity mirror lamp connector	*Roof Harness Routing - Front*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J308	Body Wiring Harness	C69	In the body wiring harness, left side of the passenger compartment, approximately 22 cm (9 in) from the breakout for the door jamb switch LR side	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)	—
J309	Side Access Panel Wiring Harness	PRP	Adjacent to X53A Fuse Block - Rear Body	—	—
J310	Body Wiring Harness	C69	In the body wiring harness, left side of the passenger compartment, approximately 32 cm (12.79 in) from the breakout for the door jamb switch left rear side	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)	—
J311	Body Wiring Harness	C69	In the body wiring harness, left side of the passenger compartment, approximately 5 cm (2 in) from the door jamb switch LR side breakout	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)	—
J314	Front Headliner Wiring Harness	—	In the front headliner wiring harness, center of the headliner, approximately 22 cm (8.5 in) from the X205 breakout towards the left vanity mirror lamp connector	Roof Harness Routing - Front	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J315	Chassis Wiring Harness	—	In the chassis wiring harness, left side frame, approximately 31 cm (12 in) from the G300 breakout	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Chassis Harness Routing - Underbody (Cutaway) (-NE7) • Chassis Harness Routing - Underbody (Passenger or Cargo with LWB) • Chassis Harness Routing - Underbody (Passenger or Cargo with SWB)	—
J322	Body Wiring Harness	Cargo/Passenger with AU3	In the body wiring harness, near the front passenger seat, approximately 40 cm (16 in) from the X306 breakout	Body Harness Routing - Right Front Passenger Compartment	—
J323	Body Wiring Harness	Cargo/Passenger with AU3	In the body wiring harness, near the front passenger seat, approximately 20 cm (8 in) from the X306 breakout	Body Harness Routing - Right Front Passenger Compartment	—
J330	Rear Headliner Wiring Harness	Passenger	In the rear headliner wiring harness, center of the headliner, approximately 30 cm (12 in) to the courtesy reading lamp rear breakout	Roof Harness Routing - Rear	—
J331	Body Wiring Harness	Passenger	In the body wiring harness, near the front passenger seat, approximately 15 cm (6 in) from the X306 breakout	Body Harness Routing - Right Front Passenger Compartment	—
J332	Front Headliner Wiring Harness	DH6 with YF7	In the front headliner wiring harness, center of the headliner, approximately 11 cm (4 in) from the front right sunshade breakout	—	—
J333	Front Headliner Wiring Harness	DH6 without YF7	In the front headliner wiring harness, center of the headliner, approximately 20 cm (8 in) from the right sunshade breakout	Roof Harness Routing - Front	—
J334	Body Wiring Harness	UVC	Approximately 5 inches rearward of X53A Fuse Block - Rear Body	• Body Harness Routing - Left Front Passenger Compartment (Cargo) • Body Harness Routing - Left Front Passenger Compartment (Cutaway) • Body Harness Routing - Left Front Passenger Compartment (Passenger)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J335	Front Headliner Wiring Harness	U80	In the front headliner wiring harness, approximately 21.5 cm (8.5 in) from the right sunshade	*Roof Harness Routing - Front*	—
J348	Side Access Panel Wiring Harness	PRP	In the cargo area, in-between the headliner and the roof, in-between the left side access panel and the right side access panel	—	—
J350	Side Access Panel Wiring Harness	PRP with UF2	In the cargo area, in-between the headliner and the roof, in-between the left side access panel and the right side access panel	—	—
J355	Front Headliner Wiring Harness	C69 with YF7	In the front headliner wiring harness, center of the headliner, approximately 61 cm (24 in) from the X205 breakout towards the left vanity mirror lamp connector	*Body Harness Routing - Left Front Passenger Compartment (Cutaway)*	—
J356	Body Wiring Harness	—	In the body wiring harness, on the left front side of the vehicle, approximately 20 cm (7.87 in) from the underhood fuse block breakout	• *Body Harness Routing - Left Front Passenger Compartment (Cargo)* • *Body Harness Routing - Left Front Passenger Compartment (Passenger)*	—
J357	Body Wiring Harness	—	In the body wiring harness, approximately 9.0 cm (3.54 in) from the breakout for X307	• *Body Harness Routing - Left Front Passenger Compartment (Cargo)* • *Body Harness Routing - Left Front Passenger Compartment (Cutaway)* • *Body Harness Routing - Left Front Passenger Compartment (Passenger)*	—
J359	Body Wiring Harness	U80	In the body wiring harness, approximately 20.0 cm (7.9 in) from the multi-axis acceleration sensor module breakout	*Body Harness Routing - Right Front Passenger Compartment*	—
J373	Body Wiring Harness	Passenger	At the base of the right C-pillar	*Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)*	—
J374	Body Wiring Harness	Cargo without YF7	In the body wiring harness, approximately 20 cm (7.9 in) from the dome lamp – left roof rail breakout	*Body Harness Routing - Left Front Passenger Compartment (Cargo)*	—
J375	Body Wiring Harness	Cargo without YF7	In the body wiring harness, approximately 20 cm (7.9 in) from the dome lamp – right roof rail breakout	*Body Harness Routing - Left Rear Passenger Compartment (Cargo)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J376	Body Wiring Harness	Cargo/Passenger	In the body wiring harness, approximately 72.5 cm (28.5 in) from the X410 breakout	Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)	—
J377	Side Access Panel Wiring Harness	PRP	Adjacent to X53A	—	—
J378	Side Access Panel Wiring Harness	PRP	Adjacent to X53A	—	—
J387	Chassis Wiring Harness	Cutaway	In the chassis wiring harness, approximately 6 cm (2.36 in) from the trailer connector breakout	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Chassis Harness Routing - Underbody (Cutaway) (-NE7)	—
J388	Chassis Wiring Harness	Cutaway	In the chassis wiring harness, approximately 10 cm (3.94 in) from the trailer connector breakout	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Chassis Harness Routing - Underbody (Cutaway) (-NE7)	—
J401	Body Wiring Harness	C36/C49/C69	In the body wiring harness, in the left rear of the vehicle, approximately 21 cm (8 in) from the X401 breakout	Body Harness Routing - Left Rear Passenger Compartment (Passenger)	—
J402	Chassis Wiring Harness	—	In the chassis wiring harness, left frame, approximately 20 cm (7.87 in) from the G400 breakout towards the EBCM connector	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Chassis Harness Routing - Underbody (Cutaway) (-NE7) • Chassis Harness Routing - Underbody (Passenger or Cargo with LWB) • Chassis Harness Routing - Underbody (Passenger or Cargo with SWB)	—
J403	Body Wiring Harness	Cargo/Passenger	In the body wiring harness, left rear of the passenger compartment, approximately 18.5 cm (7 in) from the X402 breakout	Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J404	Chassis Wiring Harness	—	In the chassis wiring harness, left frame, approximately 10 cm (4 in) from the G400 breakout towards the EBCM connector	• Chassis Harness Routing - Underbody (Cutaway) (NE7) • Chassis Harness Routing - Underbody (Cutaway) (-NE7) • Chassis Harness Routing - Underbody (Passenger or Cargo with LWB) • Chassis Harness Routing - Underbody (Passenger or Cargo with SWB)	—
J405	Rear HVAC Wiring Harness	C36/C69	In the rear HVAC wiring harness, left rear of the passenger compartment, approximately 13 cm (5.31 in) from the auxiliary blower motor relay breakout towards X409	Auxiliary HVAC Harness Routing - Left Rear Passenger Compartment (C36/C69)	—
J407	Rear Headliner Wiring Harness	Passenger	In the rear headliner wiring harness, center of the headliner, approximately 6.5 cm (2.5 in) from X304 towards the rear courtesy/reading lamp connector	Roof Harness Routing - Rear	—
J408	Side Access Panel Wiring Harness	PRP	In the Left Side Access Panel compartment	—	—
J409	Side Access Panel Wiring Harness	PRP	In the Right Side Access Panel compartment	—	—
J410	Body Wiring Harness	Cargo/Passenger	In the body wiring harness, in the left rear of the vehicle, approximately 47 cm (18 in) from the X401 breakout	• Body Harness Routing - Left Rear Passenger Compartment (Cargo) • Body Harness Routing - Left Rear Passenger Compartment (Passenger)	—
J411	Rear HVAC Wiring Harness	C69	In the rear HVAC wiring harness, left rear of the passenger compartment, approximately 20 cm (8 in) from the blower motor relay breakout, towards X409	Auxiliary HVAC Harness Routing - Left Rear Passenger Compartment (C36/C69)	—
J412	Rear HVAC Wiring Harness	C36/C69	In the rear HVAC wiring harness, left rear of the passenger compartment, approximately 7 cm (2.8 in) from the blower motor relay breakout towards X409	Auxiliary HVAC Harness Routing - Left Rear Passenger Compartment (C36/C69)	—
J413	Rear HVAC Wiring Harness	C36/C70	In the rear HVAC wiring harness, left rear of the passenger compartment, approximately 10 cm (4 in) from the auxiliary blower motor resistor assembly breakout	Auxiliary HVAC Harness Routing - Left Rear Passenger Compartment (C36/C69)	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J420	Rear Bumper Wiring Harness	UD7	In the rear bumper wiring harness, approximately 57 cm (22 in) from the right rear middle object alarm sensor towards the left rear corner object alarm sensor	*Rear Bumper Harness Routing*	—
J421	Rear Bumper Wiring Harness	UD7	In the rear bumper wiring harness, approximately 15 cm (6 in) from the left rear corner object alarm sensor towards the right rear middle object alarm sensor	*Rear Bumper Harness Routing*	—
J425	Parking Aid Jumper Wiring Harness	UFT	At the rear of the vehicle	*Rear Bumper Harness Routing*	—
J426	Parking Aid Jumper Wiring Harness	UFT	At the rear of the vehicle	*Rear Bumper Harness Routing*	—
J431	Chassis Wiring Harness	—	In the chassis wiring harness, approximately 15 cm (5.9 in) from the fuel pump driver control module	• *Chassis Harness Routing - Underbody (Cutaway) (NE7)* • *Chassis Harness Routing - Underbody (Cutaway) (-NE7)* • *Chassis Harness Routing - Underbody (Passenger or Cargo with LWB)* • *Chassis Harness Routing - Underbody (Passenger or Cargo with SWB)*	—
J432	Chassis Wiring Harness	—	In the chassis wiring harness, approximately 11 cm (4.33 in) from the X102	• *Chassis Harness Routing - Underbody (Cutaway) (NE7)* • *Chassis Harness Routing - Underbody (Cutaway) (-NE7)* • *Chassis Harness Routing - Underbody (Passenger or Cargo with LWB)* • *Chassis Harness Routing - Underbody (Passenger or Cargo with SWB)*	—
J450	Body Wiring Harness	—	In the body wiring harness, in the rear of the vehicle, approximately 10 cm (3.93 in) from the X415 breakout	*Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)*	—
J451	Body Wiring Harness	—	In the body wiring harness, in the rear of the vehicle, approximately 17 cm (6.5 in) from the X415 breakout	*Body Harness Routing - Right Rear Passenger Compartment (Cargo/Passenger)*	—

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
J452	Body Wiring Harness	—	In the body wiring harness, approximately 17 cm (6.5 in) from the X419 breakout	• Body Harness Routing - Left Rear Passenger Compartment (Cargo) • Body Harness Routing - Left Rear Passenger Compartment (Passenger)	—
J453	Body Wiring Harness	—	In the body wiring harness, in the left rear of the vehicle, approximately 10 cm (4 in) from the X419 breakout	• Body Harness Routing - Left Rear Passenger Compartment (Cargo) • Body Harness Routing - Left Rear Passenger Compartment (Passenger)	—
J500	Driver Door Wiring Harness	AU3/DE5/A31	In the left front door wiring harness, driver door, approximately 7 cm (3 in) from the left front door speaker breakout	Door Harness Routing - Driver Door	—
J501	Driver Door Wiring Harness	AU3	In the left front door wiring harness, driver door, approximately 6 cm (2.36 in) from the driver outside rearview mirror breakout	—	—
J502	Driver Door Wiring Harness	DE5	In the left front door wiring harness, driver door, approximately 4 cm (2 in) from the left front door speaker breakout	Door Harness Routing - Driver Door	—
J600	Passenger Door Wiring Harness	AU3/DE5/A31	In the right front door wiring harness, front passenger door, approximately 4 cm (2 in) from the passenger outside rearview mirror breakout	Door Harness Routing - Passenger Door	—
J601	Passenger Door Wiring Harness	AU3	In the right front door wiring harness, front passenger door, approximately 5 cm (2 in) from the passenger outside rearview mirror breakout	—	—
J901	Right Rear Cargo Door Wiring Harness	Cargo/Passenger with AU3	In the rear cargo door wiring harness, approximately 4 cm (1.5 in) from the X902 breakout	Door Harness Routing - Passenger Rear (Passenger or Cargo)	—
J902	Right Rear Cargo Door Wiring Harness	Cargo/Passenger with C49	In the right rear door wiring harness, right rear cargo door, approximately 12 cm (4.7 in) from the X902 breakout	Door Harness Routing - Passenger Rear (Passenger or Cargo)	—
JX200	Instrument Panel Wiring Harness	—	In the instrument panel wiring harness, left front side of the floor, where the carpet ends behind the brake pedal next to JX250	Instrument Panel Harness Routing - Rear of Instrument Panel	JX200 Splice Pack

Master Electrical Component List (cont'd)

Code	Name	Option	Location	Locator View	Connector End View
JX250	Instrument Panel Wiring Harness	—	In the instrument panel wiring harness, left front side of the floor, where the carpet ends behind the brake pedal next to JX200	*Instrument Panel Harness Routing - Rear of Instrument Panel*	*JX250 Splice Pack*
JX347	Body Wiring Harness	—	In the body wiring harness, left side of the passenger compartment, attached to the lower left B-pillar part of G347	• *Body Harness Routing - Left Front Passenger Compartment (Cargo)* • *Body Harness Routing - Left Front Passenger Compartment (Cutaway)* • *Body Harness Routing - Left Front Passenger Compartment (Passenger)*	*JX347 Splice Pack*
JX348	Body Wiring Harness	—	In the body wiring harness, right side of the passenger compartment, attached to the lower right B-pillar part of G348	*Body Harness Routing - Right Front Passenger Compartment*	*JX348 Splice Pack*

Description and Operation

Power Mode Description and Operation

Serial Data Power Mode Master

Power to many of this vehicles circuits is controlled by the module that is designated the power mode master (PMM). This vehicles PMM is the body control module (BCM). The BCM has multiple B+ circuits that feed into it. Each of those circuits are partitioned within the controller to drive certain outputs of the vehicle's body functions. An open or short in any one of the B+ circuits may induce multiple codes/or a section of non-functionality within the BCM with the rest of the BCM functioning normally. In this case it is usefull to refer to the power distribution schematics to determine if the non-functional partition of the controller shares a common B+ circuit. The ignition switch is a low current switch with multiple discrete ignition switch signals to the PMM for determination of the power mode that will be sent over the serial data circuits to the other modules that need this information. The PMM will also activate relays and other direct outputs of the PMM as needed. The PMM determines which power mode (Off, Accessory, Run, Crank Request) is required, and reports this information to other modules via serial data. Modules which have switched voltage inputs may operate in a default mode if the PMM serial data message does not match what the individual module can see from its own connections.

The PMM receives ignition switch signals to identify the operators desired power mode. The PMM Power Mode Parameters table below illustrates the correct state of these input parameters (circuits) in correspondence to the ignition switch position:

PMM Power Mode Parameters

Ignition Switch Position	Power Mode Transmitted	Ign. Off / Run / Crank (Run Crank Ignition 1 Voltage Circuit)	Ignition Accessory / Run (Accessory Voltage Circuit)	Ignition Run / Crank (Ignition 1 Voltage Circuit)
Off Key Out	Off	Key Out/ACC	Inactive	Inactive
Off Key IN	Off	Key In/Off	Inactive	Inactive
Accessory	Accessory	Key Out/ACC	Active	Inactive
Run	Run	Run	Active	Active
Start	Crank Request	Crank	Inactive	Active

Relay Controlled Power Mode

The body control module (BCM) uses the discrete ignition switch inputs Run/Crank Ignition 1 Voltage, Accessory Voltage, and Ignition 1 Voltage, to distinguish the correct power mode. The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The RAP relay remains on for a timed period after the Ignition key is removed. Refer to *Retained Accessory Power Description and Operation on page 6-595* for more information on the retained accessory power (RAP) function.

BCM Awake/Sleep States

The body control module (BCM) is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.

The BCM will enter the awake state if any of the following wake-up inputs are detected:

- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Key-in-ignition
- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when all of the following conditions exist:

- The ignition switch is OFF, key out.
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

Retained Accessory Power Description and Operation

Retained Accessory Power (RAP)

The retained accessory power (RAP) system allows specific vehicle functions to operate for a specific amount of time after the ignition switch is turned OFF. The BCM monitors the ignition switch position, battery condition, and each door ajar/open switch status to determine whether RAP should be initiated or terminated. RAP is controlled with 2 different methods; serial data and relay control. Some modules receive a RAP message over the serial data circuits. Serial data controlled RAP is deactivated as required by their modules RAP power mode operation. Other subsystems are activated directly by the BCM through a RAP relay. Components and systems that are active in RAP are also activated anytime the ignition is any position other than OFF regardless of the door switch signals. The RAP relay is located in the body fuse block, is grounded at G302, and is controlled by the rap relay coil control circuit from the BCM.

Relay Controlled RAP

The BCM keeps the RAP relay energized during all power modes, except Off-Awake and Crank. The relay is also energized for approximately 10 minutes after shutting the ignition OFF and removing the key, providing no door is opened.

Relay controlled RAP will end when one of the following conditions is met:

- The BCM receives an input from any door ajar switch indicating the opening of any door after the ignition key is out of the ignition.

Important: If the BCM is receiving any door ajar signal from those switches when the ignition key is turned OFF, RAP will not initiate.

- The BCM internal timer for the RAP expires after approximately 10 minutes.
- The BCM detects a decrease in battery capacity below a prescribed limit.

The power window system is powered by the RAP relay during the retained accessory power (RAP) power mode.

Serial Data Controlled RAP

RAP systems controlled by serial data are as follows:

Radio

Radio RAP activation/termination is the same as relay operation with 1 exception; the only door switch that will turn off the radio during RAP is the driver door open switch.

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Section 7

Safety and Security

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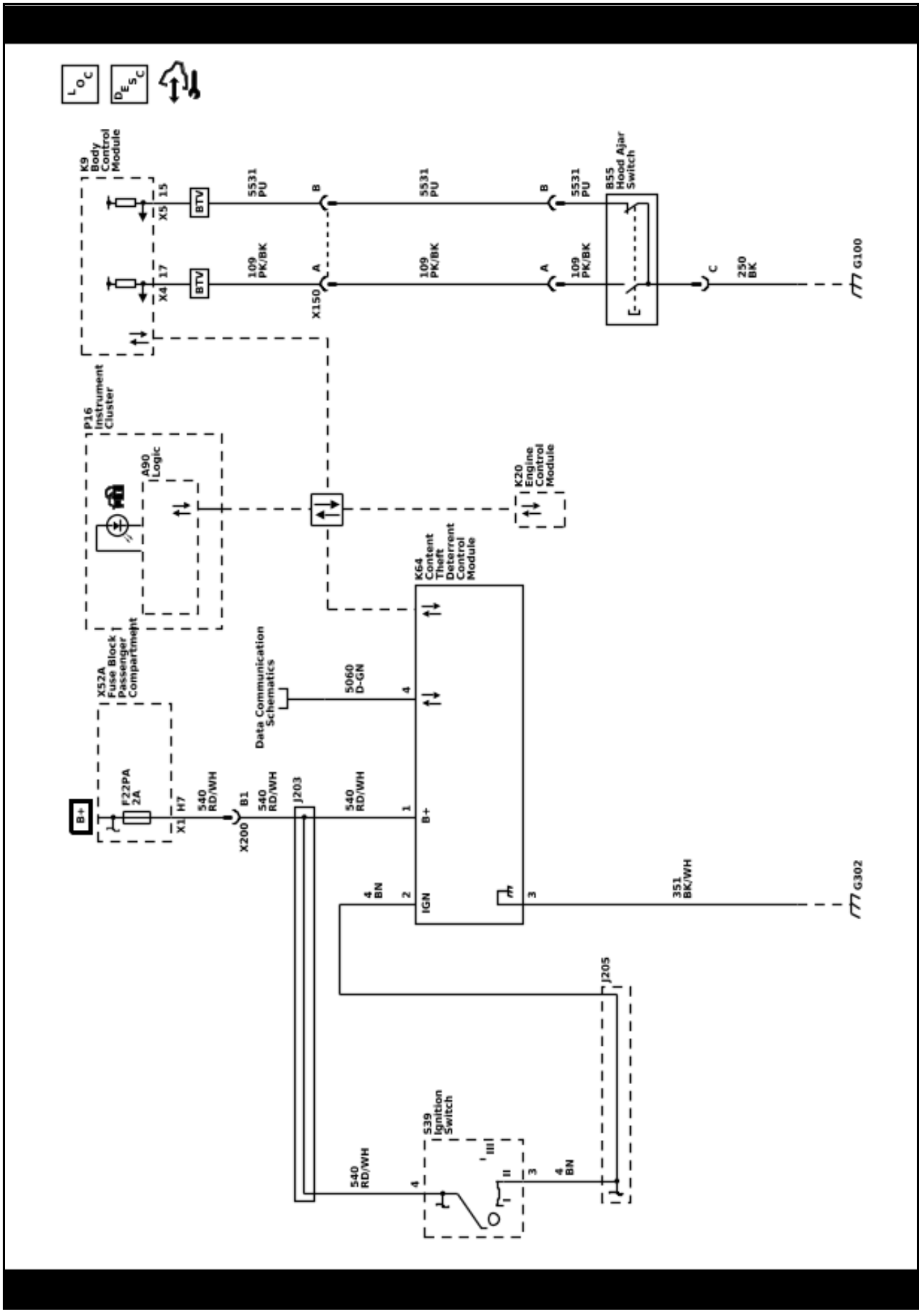
Immobilizer

Schematic and Routing Diagrams

Immobilizer Schematics (Immobilizer)



Description and Operation

Immobilizer Description and Operation

The immobilizer system functions are provided by the theft deterrent module (TDM) and the engine control module (ECM). When an ignition key is inserted into the ignition lock cylinder and the ignition is switched ON, the transponder embedded in the head of the key is energized by the exciter coil surrounding the ignition lock cylinder. This exciter coil is part of the TDM. The energized transponder transmits a signal that contains its unique value, which is received by the TDM. The TDM then compares this value to a value stored in memory. If the values match, the TDM will send the prerelease password via the serial data circuit to the ECM. If the transponders unique value is incorrect, the TDM will send the fuel disable password to the ECM.

When the ECM receives the TDM prerelease password, the ECM will challenge the password. The ECM sends this challenge back to the TDM via the serial data circuit. Both the ECM and TDM perform a calculation on this challenge. If the calculated response from the TDM equals the calculation performed by the ECM, the ECM will allow vehicle starting.

The components of the theft system are as follows:

- TDM
- ECM
- Ignition key (Transponder)
- Security indicator

Theft Deterrent Module (TDM)

Vehicles with steering column mounted ignition switches have the exciter integral with the theft deterrent module (TDM), which is located within the steering column. The TDM can learn up to 10 keys (transponder values).

The TDM uses the following inputs:

- Battery voltage
- Ignition switched voltage
- Ground circuit

The theft deterrent control module uses the following outputs:

- Password exchange
- Challenge/response with the engine control module (ECM)

When an ignition key is inserted into the ignition lock cylinder and the ignition is switched ON, the transponder embedded in the head of the key is energized by the exciter coils surrounding the ignition lock cylinder. The energized transponder transmits a signal that contains its unique value, which is received by the TDM. The TDM then compares this value to the learned key code stored in memory. The TDM then performs one of the following functions:

- If the transponder value matches the values stored in the TDM memory, the TDM will send the prerelease password to the ECM via the serial data circuit.
- If the transponders unique value does not match the value stored in the TDM, the TDM will send the fuel disable message to the ECM via the serial data circuit.
- If the TDM is unable to measure the ignition key transponder value, the TDM will not send any messages to the ECM.

Engine Control Module (ECM)

When the engine control module (ECM) receives the theft deterrent module (TDM) prerelease password, the ECM will challenge the password. The ECM sends this challenge back to the TDM via the serial data circuit. Both the ECM and TDM perform a calculation on this challenge. If the calculated response from the TDM equals the calculation performed by the ECM, the ECM will allow vehicle starting.

The ECM will disable vehicle starting if any of the following conditions occur:

- The prerelease password is invalid.
- The fuel disable password is sent by the TDM.
- No passwords are received. There is no communication with the TDM.
- The TDM calculated response to the challenge does not equal the calculation performed by the ECM.

The Ignition Key (Transponder)

Note: The ignition key will be stamped with a + or a + surrounded by a circle. This symbol only identifies the key as a PassKey III+ transponder key and is not a reliable way to determine if a particular key is the correct key for a vehicle. Service parts may have a different stamped symbol than the production part. The only way to determine the proper key for a vehicle is by referencing the parts catalog.

The ignition key for PassKey III+ (PK3+) equipped vehicles is a standard ignition key with a transponder located in the plastic head of the key. The transponder value is fixed and unable to be changed. The immobilizer system uses the ignition key transponder value to determine if a valid ignition key is being used to start the vehicle. There are approximately 3 trillion possible transponder values. There are no visible electrical contacts. The immobilizer system use the following types of ignition keys:

Master Keys

Master keys have a black plastic head for full access operation of the vehicle. Master keys may perform the following functions:

- Start the vehicle.
- Lock/unlock all of the door locks and rear compartment.
- Lock/unlock all of the storage compartments.

Valet Keys

Important: Valet keys are NOT standard equipment on all GM vehicle lines.

Valet keys have a gray plastic head and are for restricted operation of the vehicle. Valet keys may perform the following functions:

- Start the vehicle.
- Lock/unlock all of the door locks.

Fleet Keys

Important: Fleet keys are NOT standard equipment on all GM vehicle lines.

Fleets keys allow full access to the vehicle just as a master key would. However, unlike a master key which may only learn 10 keys to a particular vehicle, an unlimited number of fleet keys may be learned to the vehicle. Fleet keys are only used in vehicles configured for fleet use with RPO 6E2 or 6E8.

- Start the vehicle.
- Lock/unlock all of the door locks and rear compartment.
- Lock/unlock all of the storage compartments.

Security Indicator

The theft deterrent module (TDM) can command the instrument panel cluster (IPC) to illuminate the security indicator only when the ignition key is in the ON position. The TDM will command the security indicator be illuminated any time a fault is noted in the immobilizer system and when the engine starting is disabled.

Remote Vehicle Speed Limiting Description and Operation

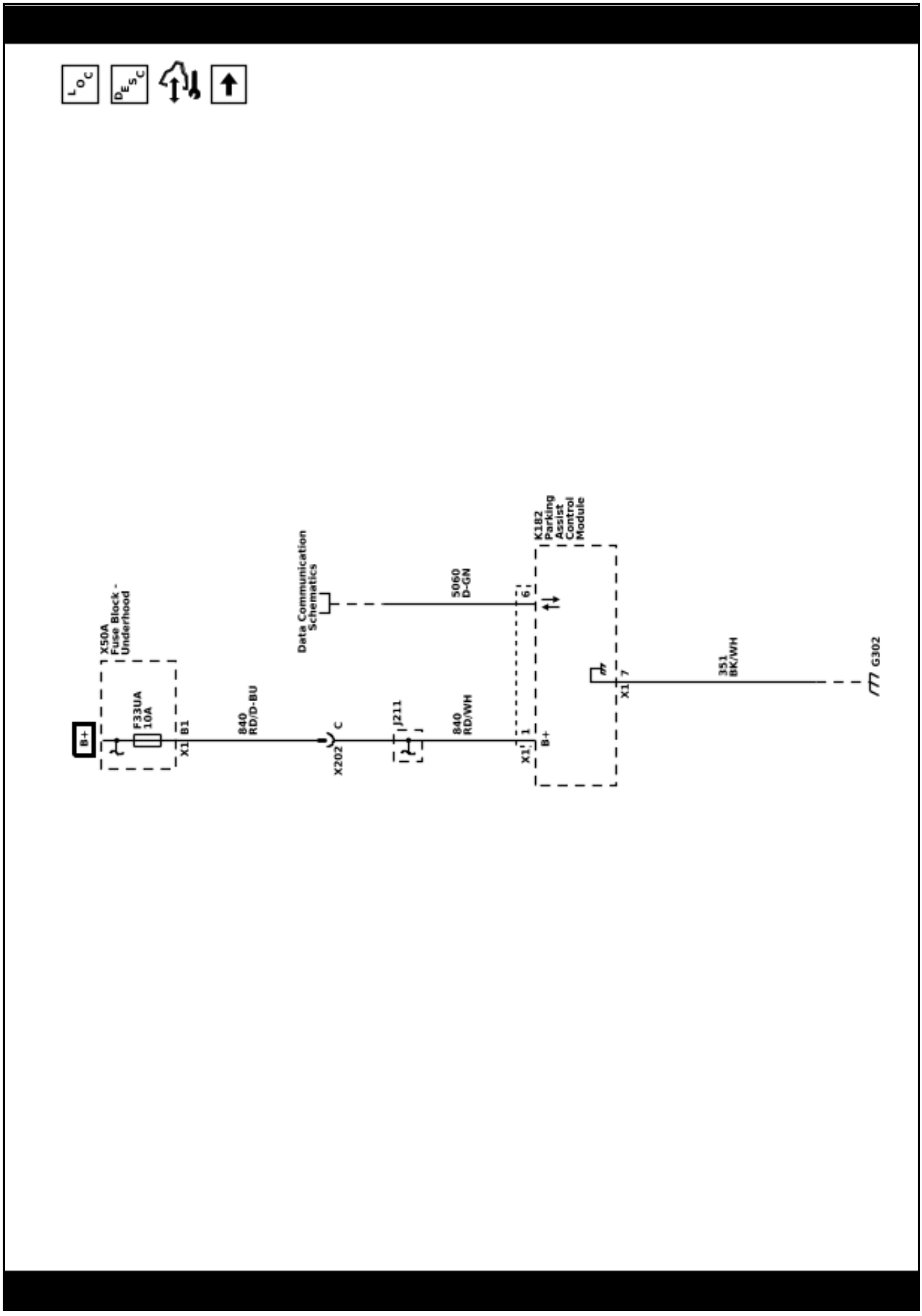
Certain vehicles equipped with OnStar® now have an additional feature that allows for remote limiting of the vehicle's speed. This OnStar® feature is called Stolen Vehicle Slow-Down and is now part of the OnStar® Stolen Vehicle Assistance service. This feature, when used in conjunction with local law enforcement and strict guidelines at the OnStar® Call Center, will slow the vehicle by interacting with the engine control system.

When the engine control system receives a valid request from the OnStar® telematics communications interface module, it will enter into a reduced engine power/vehicle speed limiting mode, which will decelerate the vehicle. Once the request is active the engine control module begins reducing engine torque to match requested vehicle speed and a REDUCED ENGINE POWER indication is displayed. No DTCs will be set during this process.

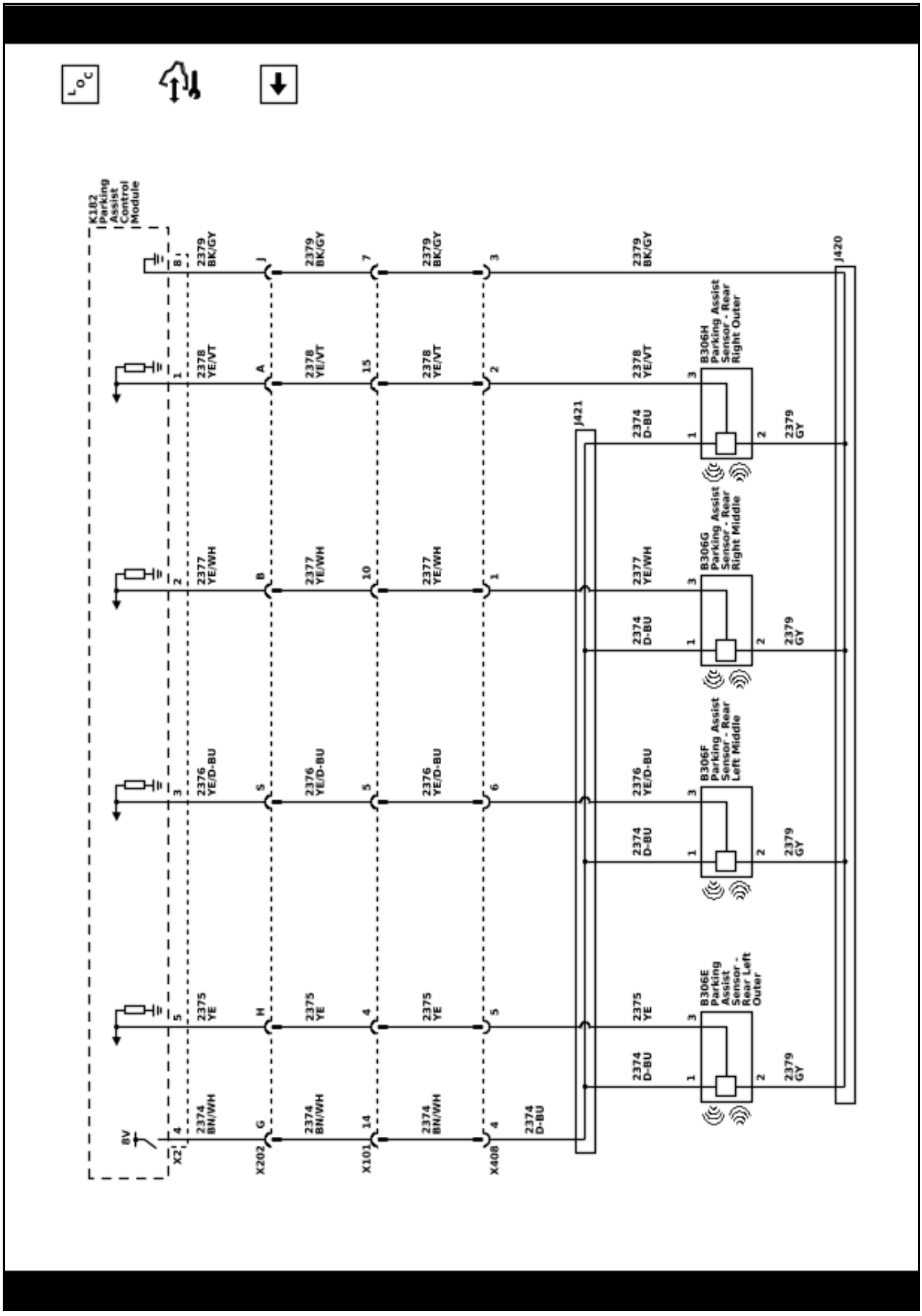
Parking Assistance Systems

Schematic and Routing Diagrams

Parking Assistance Systems Schematics (Rear Object Sensing Power, Ground, and Serial Data (UD7))



Parking Assistance Systems Schematics (Rear Object Sensors (UD7))



Description and Operation

Parking Assist Description and Operation

The parking assist system is designed to identify and notify the driver of an object in the vehicle path when reversing at speeds of less than 8 km/h (5 MPH). The distance and location of the object is determined by four object sensors located in the rear fascia. The parking assist system will notify the driver using audible beeps through the radio.

The parking assist system is made up of the following components:

- Rear parking assist control module
- Rear object sensors
- Radio

Parking Assist Control Module

The rear parking assist control module provides a reference voltage and a low reference to the four object alarm sensors. The rear parking assist control module receives individual signals from each of the four sensors and determines the location and distance of an object based on these inputs. When an object is detected, the rear parking assist control module will send a data message via serial data to the radio requesting an audible alert.

Object Sensors

The object sensors are located in the rear fascia. The sensors are used to determine the distance between an object and the rear of the vehicle. Each sensor emits an ultrasonic frequency which is reflected off an object behind the vehicle. These reflections are received by the sensors. The time difference between the emission of the frequency and when the reflection is received is known as sensor echo time, it is used to determine the distance to the object. The sensors report this information to the rear parking assist control module.

Radio

The radio controls the audible alert for the park assist alert. If the an object is detected the radio will command beeps as an audible alert to the driver.

Parking Assist Operation

When an object is within the measuring range of the sensor, the ultrasonic pulse is reflected and is received by the sending or a neighboring sensor. The sensor converts this signal into a voltage signal and sends this signal to the rear parking assist control module. The rear parking assist control module evaluates the received sensor signals. As soon as an object is within the measuring range, the rear parking assist control module sends a message via serial data to the radio to provide an alert signal.

The parking assist system can detect objects greater than 7.6 cm (3 in) wide and 25.4 cm (10 in) tall. The system cannot detect objects below the bumper, underneath the vehicle.

The parking assist can be activated and deactivated by pressing the parking assist switch. When REVERSE gear is selected, park assist is automatically activated. By subsequently pressing the parking assist switch the parking assist can be disabled again.

The rear parking assist control module carries out a self test and monitors the sensors for electrical and mechanical faults. Monitored is the power supply of each sensor and the sensor signals, which need to alter when the vehicle moves. If this is not the case, the sensor is acoustically blocked or faulty. Mud, ice and snow may cause obstruction of the function of the sensors. The rear parking assist control module also checks whether the correct type of sensor is installed. If any of these tests fails, a DTC with corresponding symptom is set, the parking assist is deactivated and the parking assist indicator in the instrument panel cluster is activated.

Parking Assist System Driver Information Center Messages

SERVICE PARK ASSIST

The driver information center displays SERVICE PARK ASSIST when the rear parking assist control module detects a malfunction in the parking assist system and the system is disabled. The driver information center also displays SERVICE PARK ASSIST when a loss of communication occurs with the rear parking assist control module.

PARK ASSIST OFF

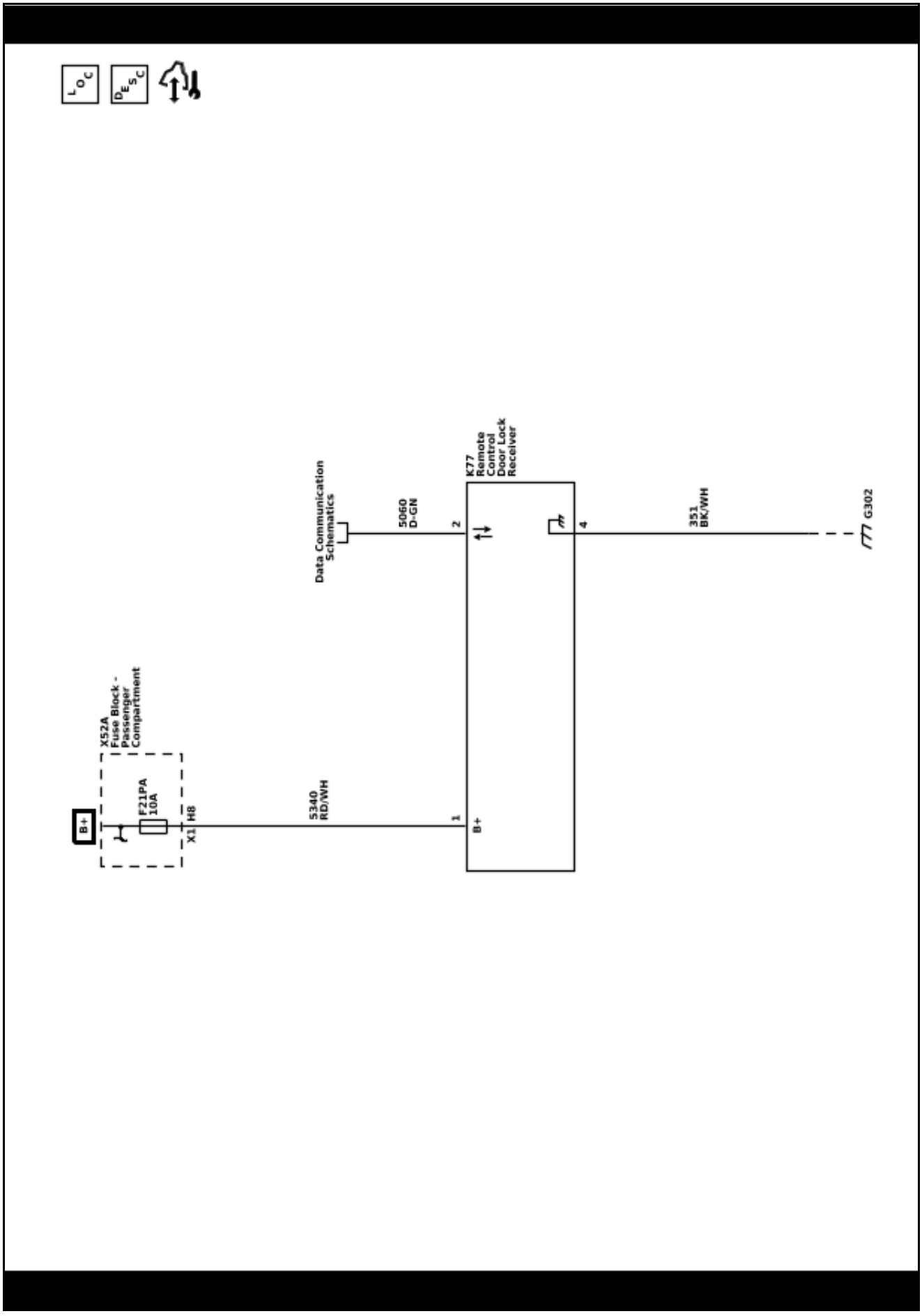
The PARK ASSIST OFF message is displayed in the driver information center when the parking assist system is disabled due to conditions that disable or inhibit the system. The rear parking assist control module requests the driver information center display PARK ASSIST OFF when it detects that one of the following conditions:

- The parking assist system is manually disabled using the parking assist switch.
- An object is attached to the rear of the vehicle, such as a trailer, bicycle rack, trailer hitch receiver, or tow bar. Also, an object extending beyond a lowered tailgate will disable the system.
- The parking assist sensors are covered by snow, mud, dirt, slush, or ice.
- The rear fascia is damaged.
- Excessive paint thickness on a replacement parking assist sensor.
- The parking assist sensors are disrupted by vibrations, like those caused by a large nearby vehicle or from heavy equipment such as a jackhammer.

Remote Functions

Schematic and Routing Diagrams

Remote Function Schematics (Keyless Entry (ATG or UJM))



Description and Operation

Front Side Door Access Control Transmitter Description and Operation ((Keypad Accessory))

Front Side Door Access Control Transmitter Description and Operation

The Front Side Door Access Control Transmitter is an accessory offered to be used as a vehicle entry device. Similar to the Keyless Entry Transmitter, the Front Side Door Access Control Transmitter will send a radio frequency signal to the Remote Control Door Lock Receiver. Next, the Remote Control Door Lock Receiver sends a signal to the Body Control Module (BCM) via LIN communication. The BCM will interpret this signal and either lock or unlock the vehicle as a result. A low transmitter battery or radio frequency interference from aftermarket devices, such as 2-way radios, power inverters, computers, etc., may cause a system malfunction. High radio frequency traffic areas, such as gas stations that use pay-at-the-pump radio frequency transponders, may also cause interference that could lead to a malfunction.

Like the Keyless Entry Transmitter, the Front Side Door Access Control Transmitter is programmed to the vehicle's Body Control Module. This means the Front Side Door Access Control Transmitter will populate one of the 8 programmable spaces in the BCM for Keyless Entry Transmitters. The Front Side Door Access Control Transmitter will need to be reprogrammed in the event of BCM replacement. This can only be achieved with the Master Code. If the Master Code is not retrievable, a new Front Side Door Access Control Transmitter with accompanying wallet card will need to be programmed to the new BCM.

The Front Side Door Access Control Transmitter has 5 buttons depicting numbers from 0 to 9. Each button represents a character of a 5 digit code that the vehicle owner may program, which will be referred to as a personal code. The user has 3 attempts to input the correct access code before the Front Side Door Access Control Transmitter enters lockout mode for 1 minute. This will occur up to 2 more times if the incorrect access code is entered repeatedly. After that, any additional 3 attempts will cause the Front Side Door Access Control Transmitter to enter lockout mode for 23 minutes. There is an LED light at the top of the Front Side Door Access Control Transmitter that provides feedback to the user. Each Front Side Door Access Control Transmitter is sold with a wallet card that contains a master code that may be used for keyless entry as well as programming a personal code. The master code will always allow operation of the Front Side Door Access Control Transmitter and may be used to program a new personal code. Entering the 5 digit access code will unlock the driver door. Pressing the 3/4 key within 5 seconds of entering the 5 digit access code with unlock all doors. Pressing the 7/8 and 9/0 button will lock all doors. To change the personal code, refer to the wallet card included with the Front Side Door Access Control Transmitter.

The Front Side Door Access Control Transmitter contains a button cell battery that is not serviceable. Once the battery exceeds the expected lifetime, the Front Side Door Access Control Transmitter will need to be replaced. A new Front Side Door Access Control Transmitter will come with new wallet card.

Keyless Entry System Description and Operation

The keyless entry system is a vehicle entry device. The keyless entry system is used in conjunction with the body control module (BCM) to remotely activate certain vehicle features. Keyless entry will lock/unlock the doors when a corresponding button on the keyless entry transmitter is pressed. This is accomplished by the transmitter sending a radio frequency to the remote control door lock receiver (RCDLR). The RCDLR interprets the signal and activates the requested function via a serial data message to the BCM. A low transmitter or vehicle battery or radio frequency (RF) interference from aftermarket devices, such as 2-way radios, power inverters, computers, etc., may cause a system malfunction. High RF traffic areas may also cause interference that could lead to a malfunction. Keyless entry allows you to operate the following components:

- Door locks
- Cargo door unlock
- Vehicle locator/Panic alarm
- Illuminated entry lamps

The keyless entry system has the following components:

- Keyless entry transmitters
- BCM
- RCDLR

Keyless Entry Transmitters

The keyless entry transmitter are used to lock and unlock the vehicle doors from a distance of up to 65 feet (20 m) away. Up to 8 transmitters may be programmed to a single vehicle.

OnStar® Remote Link

A vehicle operator may have the ability to perform some of the keyless entry functions using applications on personal devices such as smart phones.

Remote Control Door Lock Receiver (RCDLR)

The remote control door lock receiver (RCDLR) is a multifunction module that operates both the keyless entry system as well as the tire pressure monitoring (TPM) system. The RCDLR has an internal antenna that is used to receive radio frequency (RF) communications sent by the keyless entry transmitters. When an RF message is received from a keyless entry transmitter, the RCDLR interprets this signal and will request via serial data that the body control module (BCM) perform the specific function, i.e. door lock, door unlock, or vehicle locate. The RCDLR also receives RF signals from the TPM sensors located at each wheel.

Unlock Driver Door Only

Momentarily press the transmitter UNLOCK button in order to perform the following functions:

- Unlock only the driver door.
- Illuminate the interior lamps for a determined length of time, or until the ignition is turned ON.
- Flash the exterior lights, if enabled through personalization.

Unlock All Doors – Second Operation

Momentarily press the transmitter UNLOCK button a second time, within 5 seconds of the first press, to perform the following functions:

- Unlock the remaining doors.
- Unlock the cargo doors.

Cargo Door Unlock

Momentarily press the transmitter cargo door unlock button a second time, within 5 seconds of the first press, to perform the following function:

Unlock only the cargo doors.

Lock All Doors

Press the transmitter LOCK button to perform the following functions:

- Lock all vehicle doors.
- Immediately turn OFF the interior lamps.
- Flash the exterior lights, if enabled through personalization.
- Chirp the horn, if enabled through personalization.

Vehicle Locator/Panic Alarm

A single press of the panic button performs the following functions. Some functions may be dependent on personalization settings:

- Pulse the horn three times.
- Flash the exterior lamps three times.

A press and hold of the panic button performs the following functions:

- Illuminate the interior lamps.
- Pulse the horn and flash the exterior lamps for 30 second or until the following conditions occur:
  - The panic button is pressed.
  - The ignition switch is turned to the RUN position with a valid key.

Remote Vehicle Start (RVS) – if equipped

The remote vehicle start (RVS) function allows engine starting while not in the vehicle. It also allows the vehicle HVAC system and other vehicle systems to enable, providing a comfortable vehicle upon entry. RVS functions have an operating range of up to 195 feet, depending on conditions. The RVS sequence begins by pressing and releasing the lock button and then pressing and holding the RVS buttons on the keyless entry transmitter. The turn signal lamps will illuminate to indicate the vehicle has received the remote start request. Each time an RVS is performed, the vehicle doors are locked, however they may then be unlocked/locked with the transmitter or vehicle key at any time. Once activated, the engine is allowed to run for 10 minutes. The RVS time may be extended by an additional 10 minute by again pressing and releasing the lock button and then pressing and holding the RVS buttons on the transmitter. This feature is called a RVS continue and allows a maximum of 20 minutes of engine running. If the RVS continue is performed at 7 minutes into the initial 10 minute time-out, a total of 17 minutes of engine running would occur. The RVS event may be suspended at any time by pressing only the RVS button on the transmitter or by entering the vehicle and turning ON the hazard lamps.

In between ignition cycles, only two RVS events may occur or be attempted. Once two events or attempts have been made, future RVS events will be suspended until the vehicle is started using the ignition.

Enable/Disable RVS

Using the driver information center (DIC), RVS may be enabled or disabled as a part of vehicle personalization. Refer to the vehicle owners manual for more information.

Hood Ajar Switch

The hood switch provides status of the hood to the BCM for RVS purposes. The switch is integrated into the hood latch assembly. The hood ajar switch provides 2 separate inputs to the BCM. These separate inputs allow the BCM to actively monitor for a hood ajar switch fault.

RVS Circuit Description

The RCDLR receives a signal from the keyless entry transmitter indicating a RVS request. A message is then sent to the BCM which determines if a crank request message will be sent to the ECM to allow engine starting. To determine if conditions are correct for an RVS event, the BCM will ensure the following conditions are met:

- All vehicle doors are closed
- A valid hood ajar switch closed signal is present
- The doors are locked
- The hazard switch is OFF
- The vehicle power mode is correct
- No content theft deterrent (CTD) alarm triggers are present
- The vehicle is not in valet mode (if equipped)

When the BCM determines all conditions meet those required for an RVS event, a message is sent via serial data to the ECM. The ECM relies on the RVS message from BCM to enable RVS when the crank request signal is received. If the ECM does not receive a valid RVS message, it will not attempt to start the engine. While the ECM is in RVS mode it will suspend engine operation if any of the following additional conditions occur:

- Vehicle speed is greater than 0
- Transmission is not in PARK
- Excessive engine coolant temperature
- Low oil pressure
- The malfunction indicator lamp (MIL) is commanded ON

- Engine crank time is greater than 30 seconds
- Excessive engine speed
- Accelerator pedal position too high
- Remote start timer equals 0
- Immobilizer system indicates tamper

Keyless Entry Personalization

Vehicle lock/unlock functions and remote vehicle start (RVS) settings may be personalized. For functional descriptions and personalization instructions, refer to the vehicle owners manual.

Rolling Code

The Keyless Entry System uses rolling code technology. Rolling code technology prevents anyone from recording the message sent from the transmitter and using the message in order to gain entry to the vehicle. The term “rolling code” refers to the way that the Keyless Entry System sends and receives the signals. The transmitter sends the signal in a different order each time. The transmitter and the remote control door lock receiver (RCDLR) are synchronized to the appropriate order. If a programmed transmitter sends a signal that is not in the order that the RCDLR expects, then the transmitter is out of synchronization. This occurs after 256 presses of any transmitter button when it is out of range of the vehicle.

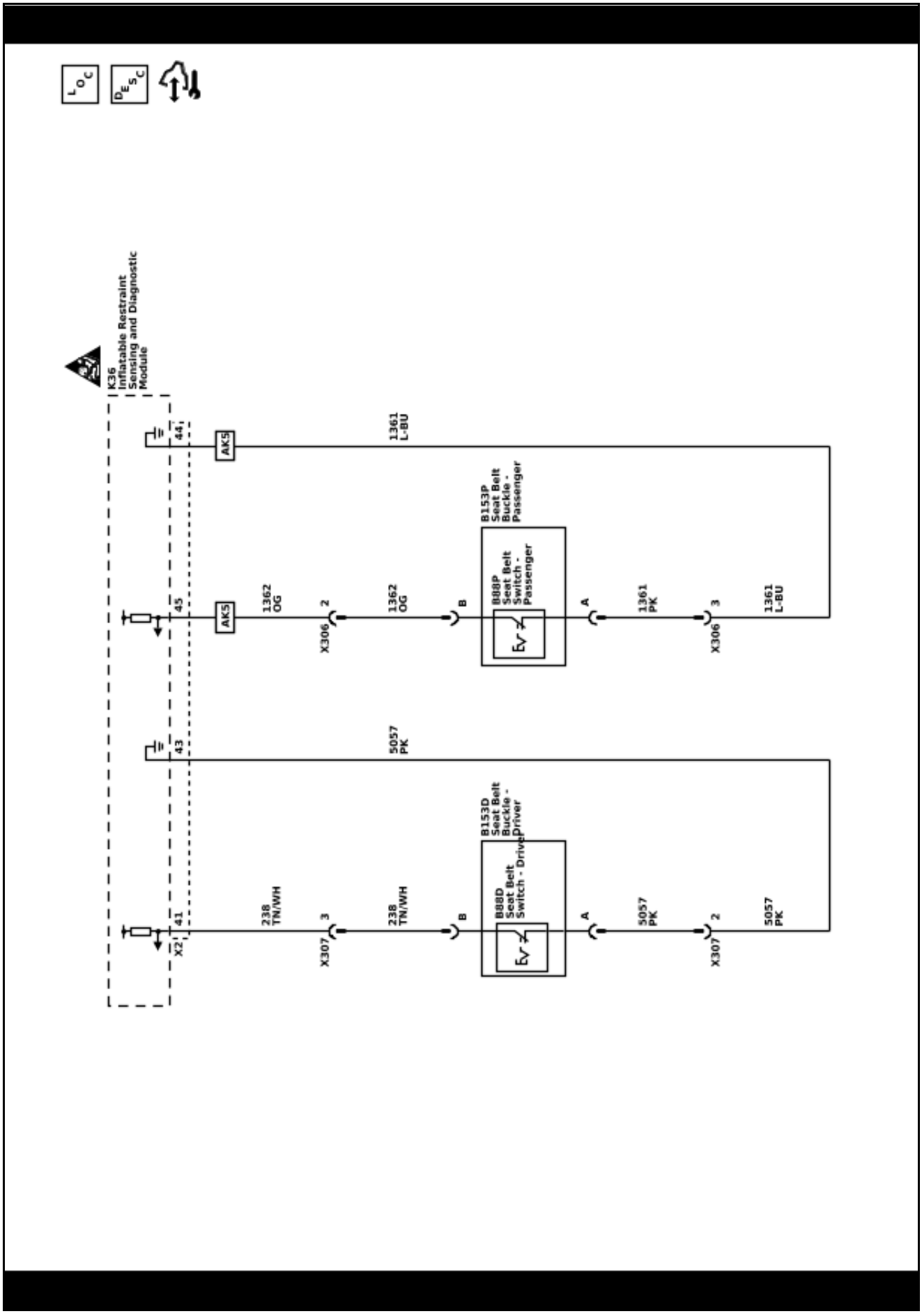
Automatic Synchronization

The keyless entry transmitters do not require a manual synchronization procedure. If needed, the transmitters automatically re-synchronize when any button on the transmitter is pressed within range of the vehicle. The transmitter will operate normally after the automatic synchronization.

Seat Belts

Schematic and Routing Diagrams

Seat Belt Schematics (Seat Belt Schematics)



Description and Operation

Seat Belt System Description and Operation

Restraint System

Seat belts are the primary means of occupant restraint.

Seat belts help to keep occupants inside the passenger compartment and to gradually reduce the impact forces.

All seat belt retractors have emergency locks. The retractors remain unlocked during normal operation and under normal driving conditions. The retractors remain unlocked during normal conditions in order to allow free movement of the upper body of each occupant.

A pendulum locks the seat belt webbing into position. The pendulum causes a locking bar to engage a cog on the spool of the retractor mechanism when the following conditions occur:

- A rapid extraction of the seat belt webbing from the retractor
- An abrupt change in the vehicle speed
- An abrupt change in the vehicle direction
- Operation of the vehicle on a steep upgrade
- Operation of the vehicle on a steep downgrade

The seat belts, except for the driver seat belt, have an automatic locking feature, or a cinch feature. The cinch feature is recommended for securing a child seat. The cinch feature is engaged by fully extending the seat belt from the retractor. Once engaged, the seat belt can retract, but cannot be extended again until the cinch feature is cancelled. The cinch feature is cancelled when the seat belt has fully retracted.

This vehicle is also equipped with a supplemental inflatable restraint (SIR) system. Refer to *Supplemental Inflatable Restraint System Description and Operation on page 7-24* for a description of the seat belt retractor pretensioner.

Front Seat Belt System

The front seat belt system includes the following components:

- The driver and passenger seat belt buckles, attached to the inboard side of the seat frame
- The driver and passenger seat belt retractor pretensioners
- The driver and passenger seat belt switch located in the seat belt buckles

Seat Belt System Circuit Description

There are two fasten safety belt indicators for this vehicle. The driver fasten safety belt indicator is located on the instrument panel cluster (IPC) and the passenger fasten safety belt indicator is located in the passenger ON/OFF indicator. Both indicators are controlled by the IPC at the request of the inflatable restraint sensing and diagnostic module (SDM). The driver indicator, when initiated, will illuminate for 20 seconds followed by 55 seconds of flashing. Audible warnings will initiate simultaneously with visual warnings and last for 8 seconds. Subsequently, similar events will occur until the seat belts are buckled or the ignition is returned to the OFF position.

The driver fasten safety belt indicator will illuminate when any of the following occur:

- The driver seat belt is unbuckled while the ignition is ON.
- The driver seat belt remains unbuckled and vehicle speed is greater than 8 km/h (5 mph).
- Three minutes after previous seat belt status reminder event
- The IPC performs the displays test at the start of each ignition cycle.

Important: The front passenger seat is equipped with a passenger presence system (PPS), which detects an occupant. If the PPS detects an empty front passenger seat, then the passenger fasten safety belt indicator will be disabled.

The passenger fasten safety belt indicator will illuminate when any of the following occur:

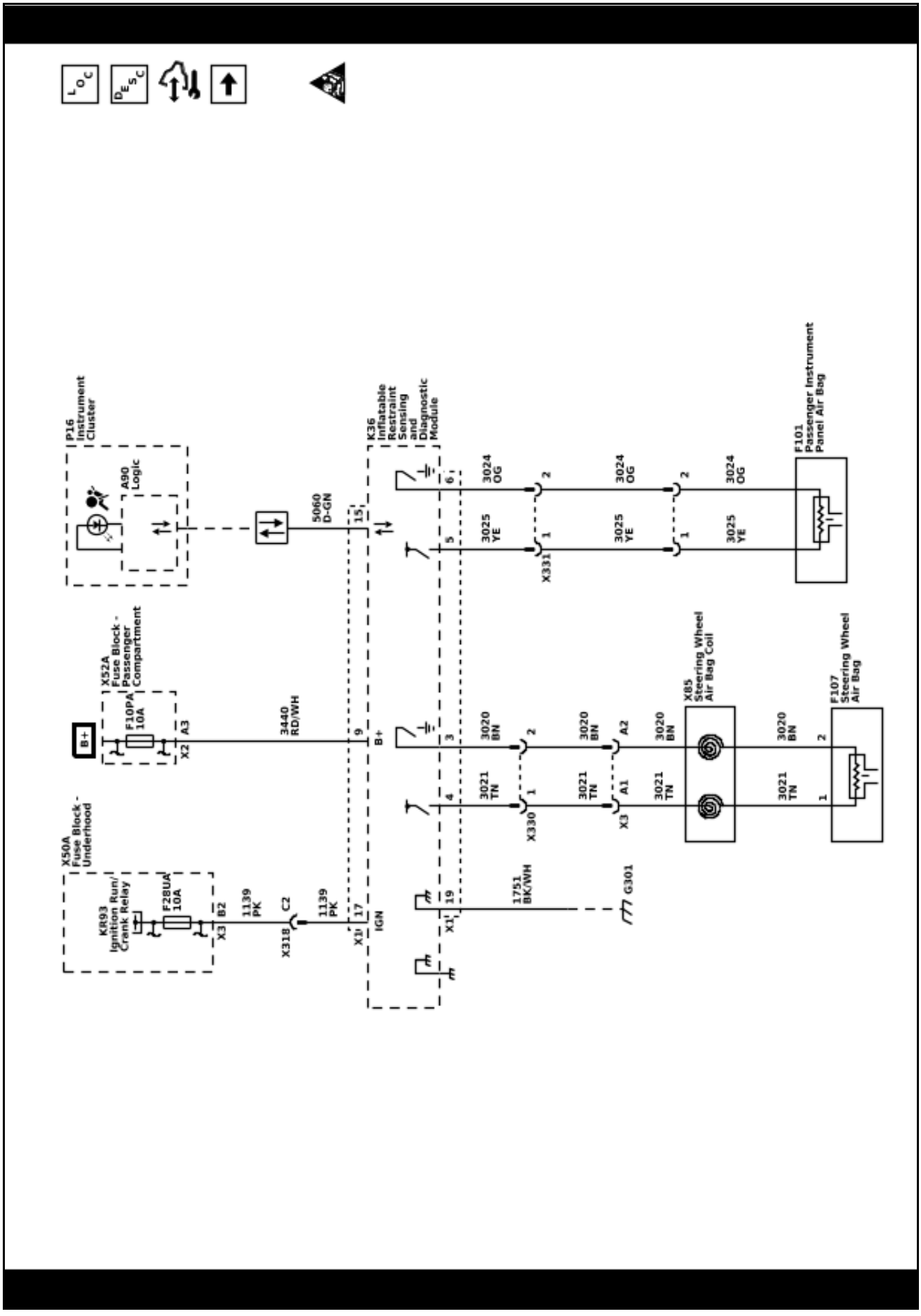
- Twenty-five seconds after the ignition is ON and the front passenger seat belt remains unbuckled with passenger present
- The front passenger seat belt remains unbuckled with passenger present and vehicle speed is greater than 5 mph (8 km/h).
- Three minutes after previous seat belt status reminder event
- The IPC performs the displays test at the start of each ignition cycle.

Refer to Symptoms - Seat Belts in order to diagnose faults of the fasten safety belt indicators.

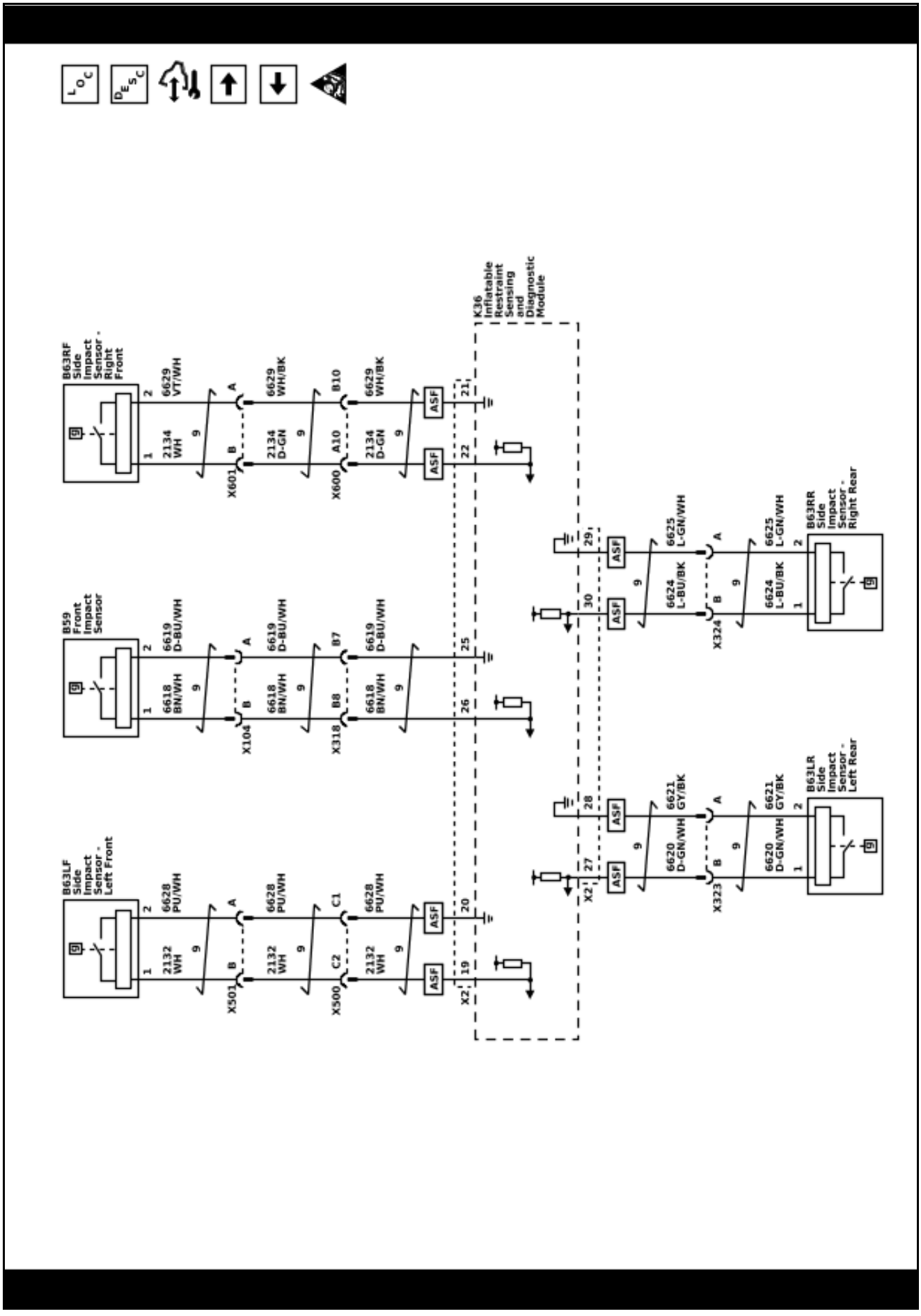
Supplemental Restraints

Schematic and Routing Diagrams

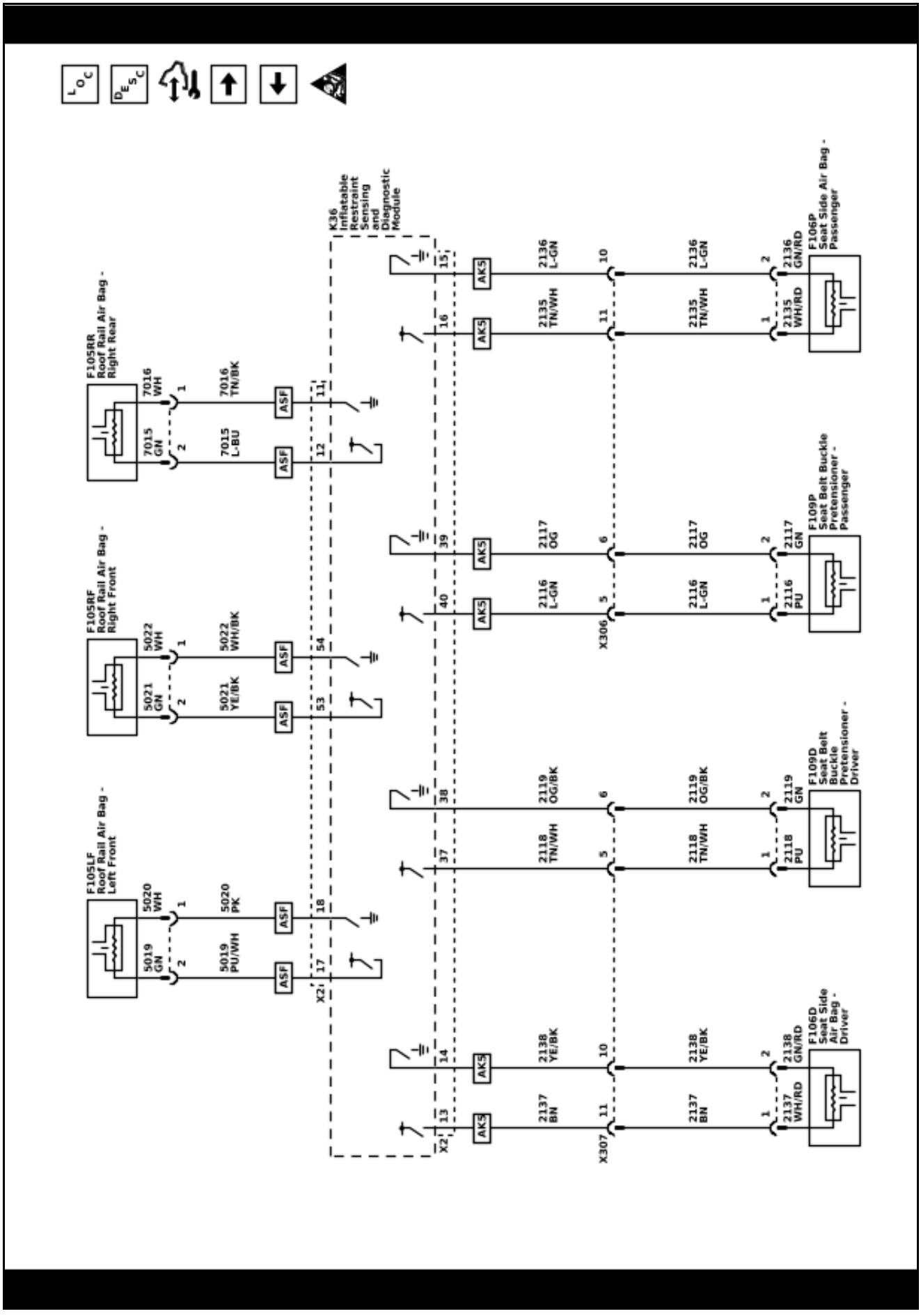
SIR Schematics (Module Power, Ground, Serial Data, and Front Air Bags)



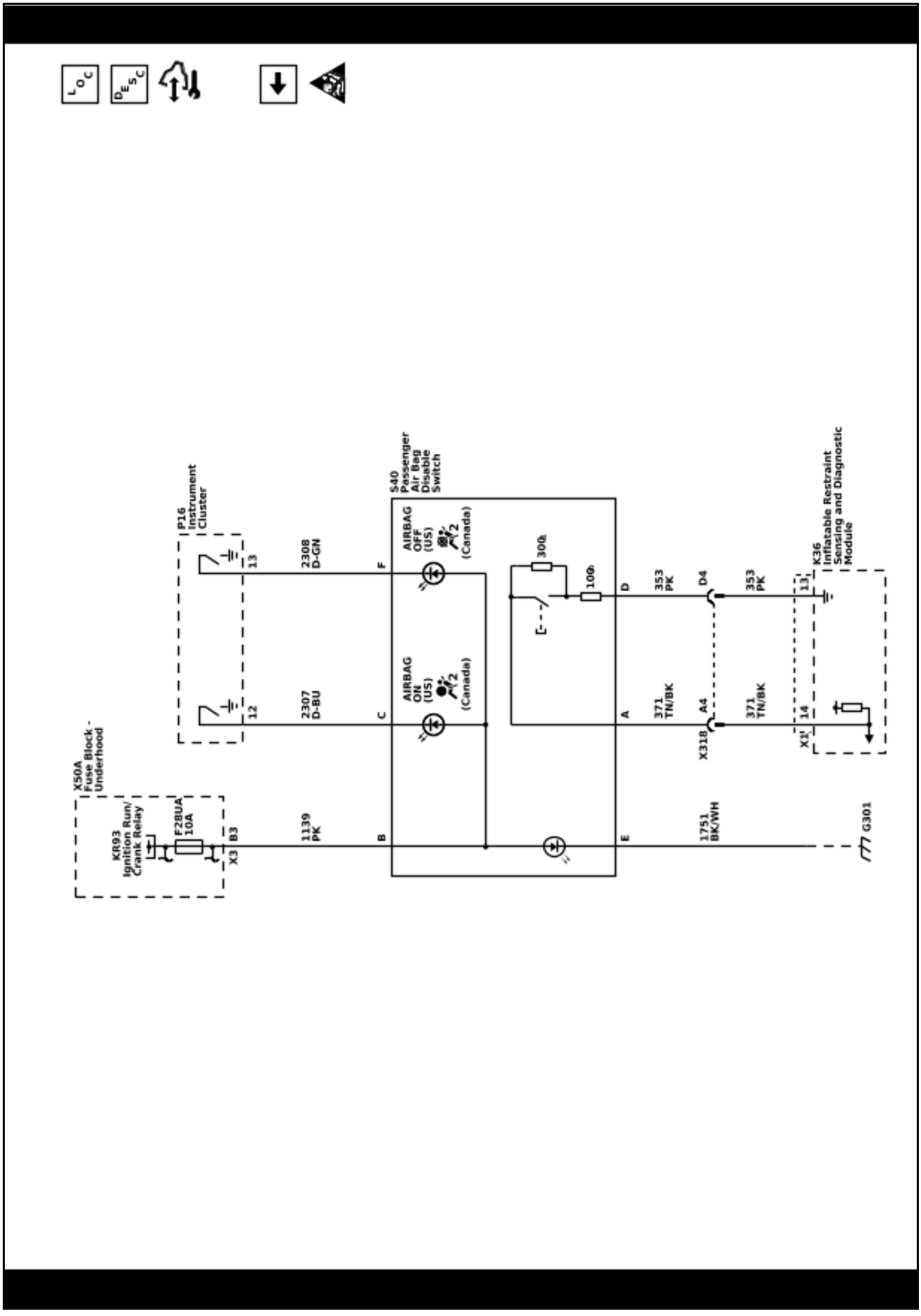
SIR Schematics (Impact Sensors)



SIR Schematics (Roof Rail Air Bags, Seat Side Air Bags, and Seat Belt Pretensioners)



SIR Schematics (Passenger Air Bag Disable Switch (C99))



Description and Operation

Supplemental Inflatable Restraint System Description and Operation

The supplemental inflatable restraint (SIR) system, comprised of the inflatable restraint sensing and diagnostic module (SDM), impact sensors, air bags, and seat belt pretensioners, supplements the protection offered by the seat belts. The SDM determines the severity of a collision using data collected from impact sensors located at strategic points on the vehicle. When the SDM detects a collision, it processes the information provided by the sensors to provide the safest combination of air bag and pretensioner deployment. The SDM will deploy the air bags and pretensioners if it detects a collision of sufficient force. If the force of the impact is not sufficient to warrant air bag deployment, the SDM may still deploy the seat belt pretensioners. The SDM contains a sensing device that translates vehicle acceleration to an electrical signal. The SDM compares these signals to the threshold values stored in memory. If the signals exceed the stored threshold value, the SDM will determine the severity of the event and may deploy restraints. The SDM continuously monitors the deployment loops and electrical components for malfunctions. Upon detection of a circuit malfunction, the SDM will set a DTC and illuminate the SIR system air bag malfunction indicator. The steering column and knee bolsters are designed to absorb energy and compress during frontal collisions to limit leg movement and decrease the chance of injury to the driver and passenger.

The supplemental inflatable restraint system utilizes the following components:

- Inflatable Restraint Sensing and Diagnostic Module
- Air Bag Indicator
- Air Bags
- Seat Belt Pretensioners
- Impact Sensors
- Passenger Presence System
- Passenger Air Bag Indicator
- Passenger Air Bag Disable Switch
- Seat Belt Indicators

Inflatable Restraint Sensing and Diagnostic Module

The SDM is the control unit for the SIR system. The SDM contains internal sensors in addition to the external impact sensors. The SDM contains sensor which translate vehicle acceleration into an electrical signal, which may be used by other modules. In the event of a collision, the SDM compares the signals from the internal and external impact sensors to a threshold value stored in memory. When the generated signals exceed the stored value, the SDM will cause current to flow through the appropriate deployment loops to deploy the restraints. The SDM records the SIR system status when a deployment occurs and illuminates the air bag malfunction indicator. The SDM performs continuous diagnostic monitoring of the SIR system electrical components and circuitry when the ignition is on. If the SDM detects a malfunction, a DTC will set and the SDM will command the instrument cluster to illuminate the air bag malfunction indicator, notifying the driver that a malfunction exists. If power is lost during a collision, the SDM maintains a 23 V loop reserve for deployment of the air bags. It is important when disabling the SIR system for servicing or rescue operations to allow the 23 V loop reserve to dissipate, which could take up to 1 minute.

Air Bag Indicator

The SIR system air bag indicator, located in the instrument cluster, is used to notify the driver of SIR system malfunctions and verify that the SDM is communicating with the instrument cluster. When the ignition is turned on, the SDM is supplied with ignition voltage. The instrument cluster will momentarily turn on the SIR system air bag indicator. While the indicator is on, the SDM conducts tests on all SIR system components and circuits. If no malfunctions are detected the SDM will communicate with the instrument cluster through the serial data circuit and command the SIR system air bag malfunction indicator to turn off. The SDM provides continuous monitoring of the air bag circuits by conducting a sequence of checks. If a malfunction is detected the SDM will set a DTC and command the instrument cluster to illuminate the SIR system air bag malfunction indicator via serial data. The presence of an SIR system malfunction could result in non-deployment of the inflatable restraints or deployment in conditions that normally would not warrant deployment. The SIR system air bag malfunction indicator will remain on until the malfunction has been repaired.

Air Bags

The vehicle will contain a number of air bags, depending on vehicle available and optional equipment:

- Steering wheel
- Instrument panel
- Driver seat
- Passenger seat
- Left roof rail
- Right roof rail

To view the locations of the air bags refer to: *Master Electrical Component List on page 6-555*.

The steering wheel and instrument panel air bag are a single-stage design. The air bags contain a housing, inflatable air bag, an initiating device, a canister of gas generating material and, in some cases, stored compressed gas. Each air bag has a discrete deployment loop to supply current and deploy the air bag. The current passing through the air bags ignite the material in the canister producing a rapid generation of gas and is some cases, the release of compressed gas. The gas produced from this reaction rapidly inflates the air bag. Once the air bag is inflated, it deflates through the air bag vent holes and/or the bag fabric. A shorting bar (if equipped) is located in the connector.

Seat Belt Pretensioners

The vehicle will contain a number of seat belt pretensioners, depending on vehicle available and optional equipment:

- Driver – Seat belt anchor
- Driver – Seat belt retractor
- Passenger – Seat belt anchor
- Passenger – Seat belt retractor

To view the locations of the seat belt pretensioners refer to: *Master Electrical Component List on page 6-555*.

The seat belt pretensioners consist of a housing, seat belt retractor, seat belt anchor, seat belt webbing, initiator, and a canister of gas generating materials. The initiator is part of the seat belt pretensioner deployment loop. When the vehicle is involved in a collision of sufficient force, the SDM causes current to flow through the seat belt deployment loops to the initiator. Current passing through the initiator ignites the material in the canister producing a rapid generation of gas. The gas produced from this reaction deploys the seat belt pretensioners which removes the slack in the seat belts. Depending on the severity of the collision, the seat belt pretensioners may deploy without the frontal inflator modules deploying, or they will deploy immediately before the frontal inflator modules deploy. Each seat belt pretensioner connector is equipped with a shorting bar, which shorts the seat belt pretensioner circuitry to prevent unwanted deployment of the seat belt pretensioner when the connector is disconnected.

Impact Sensors

The vehicle will contain a number of impact sensors, depending on vehicle available and optional equipment:

- Front
- Front Left
- Front right
- Door
- Rear Frame Rail

To view the locations of the impact sensors refer to: *Master Electrical Component List on page 6-555*.

The impact sensors contain a sensing device which monitors vehicle acceleration to detect collisions that are severe enough to warrant air bag deployment. The impact sensors are not part of the deployment loop, but instead provide input to the SDM.

Passenger Presence System

The passenger presence system is used to monitor the type of occupant that is sitting in the front passenger seat and communicate the status to the inflatable restraint sensing and diagnostic module. The inflatable restraint sensing and diagnostic module then uses this information to determine whether to enable or suppress the deployment of the passenger instrument panel air bag. The passenger presence system consists of an electronic control module, a sensor mat in the seat, a harness, and passenger air bag ON/OFF indicators.

Passenger Air Bag Indicator

The passenger air bag indicator identifies the status of the instrument panel air bag. If an occupant is not detected in the passenger seat or the occupant type is not suitable for air bag deployment, the inflatable restraint sensing and diagnostic module will illuminate the passenger air bag OFF indicator. If an occupant is detected in the passenger seat, the inflatable restraint sensing and diagnostic module will illuminate the passenger air bag ON indicator.

Passenger Air Bag Disable Switch

The passenger air bag disable switch provides the means to manually disable the ability for the passenger instrument panel air bag to deploy. The vehicle has a passenger air bag status indicator to inform the driver when the passenger air bag is on or off based on the disable switch position.

Seat Belt Indicators

The seat belt indicators are controlled by the inflatable restraint sensing and diagnostic module. For further information on seat belt indicators refer to: *Seat Belt System Description and Operation on page 7-18*.

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Section 8

Transmission

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Shift Lock Control

Schematic and Routing Diagrams

Shift Lock Control Schematics (Shift Lock Control)

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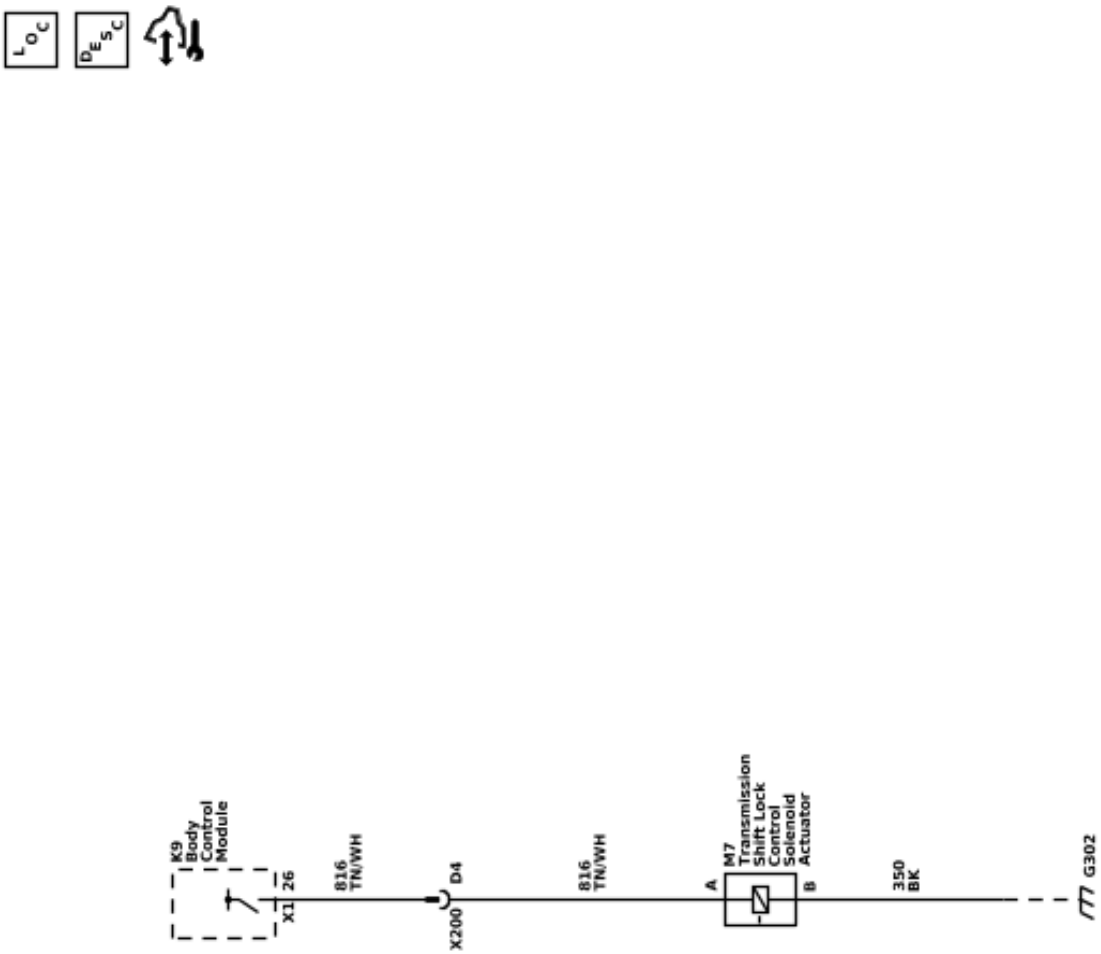

Description and Operation

Automatic Transmission Shift Lock Control Description and Operation

The automatic transmission shift lock control system is a safety device that prevents an inadvertent shift out of PARK when the engine is running. The driver must press the brake pedal before moving the shift lever out of the PARK position. The system consists of the following components:

- The automatic transmission shift lock solenoid (serviced as the automatic transmission shift lock actuator), as well as the body control module (BCM) and the engine control module (ECM). The shift lock solenoid is located within the floor shift control assembly with vehicles equipped with floor shift.
- The BCM controls the voltage to the shift lock control solenoid through the shift lock control solenoid controlled voltage circuit. The following conditions must be met before the BCM will remove voltage from the shift lock solenoid:
  - The ignition is in the ON position.
  - The engine control module (ECM) sends an input via GMLAN serial data to the BCM indicating the transmission is in the PARK position.
  - The BCM determines the brake pedal is applied according the brake pedal position.

Since the shift lock control solenoid is permanently grounded, the BCM supplies voltage to the automatic transmission shift lock control solenoid, mechanically locking the shift lever in the PARK position as the solenoid energizes. When the brake pedal is applied, the BCM turns the control voltage output of the shift lock control solenoid OFF, de-energizing the shift lock control solenoid. The de-energized solenoid releases the mechanical lock allowing the driver to move the shift lever out of the PARK position. When the transmission is out of the PARK position, the shift lock control solenoid remains de-energized.

Note: If equipped with push button start, the BCM supplies voltage to the automatic transmission shift lock control solenoid, mechanically unlocking the shift lever in the PARK position as the solenoid energizes.

During remote start operation, the BCM will energize the shift lock control circuit, locking the shift lever in the PARK position.

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